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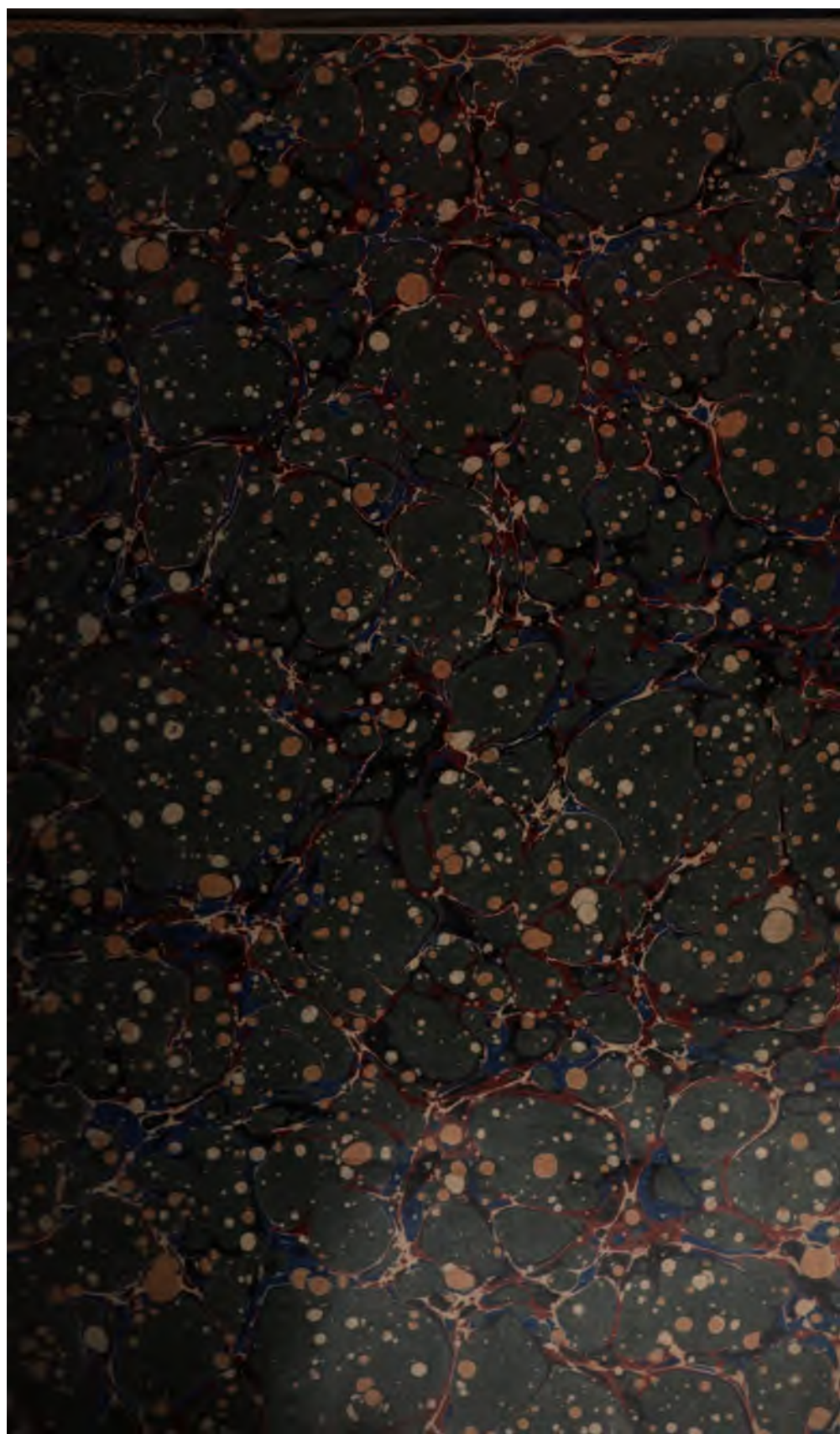
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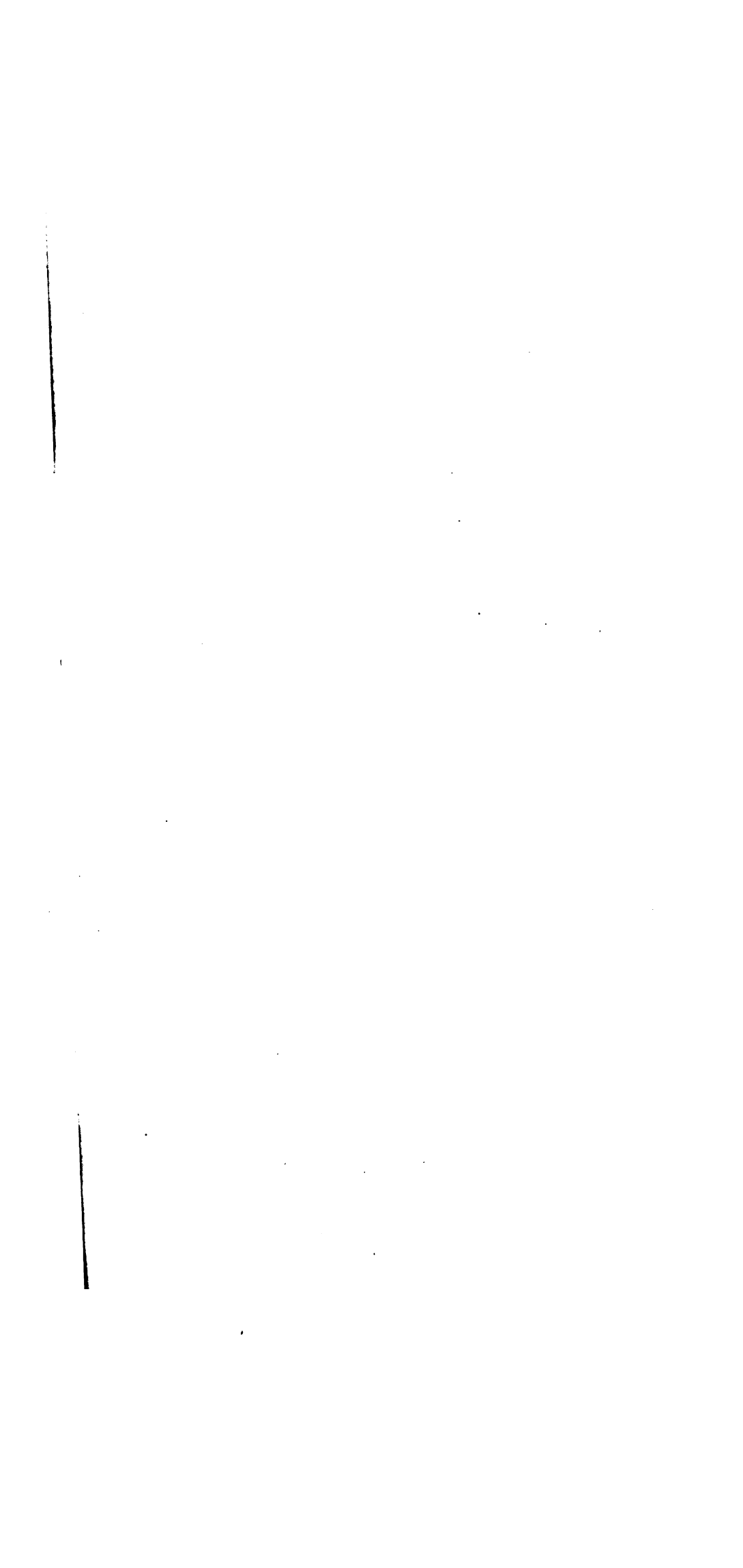


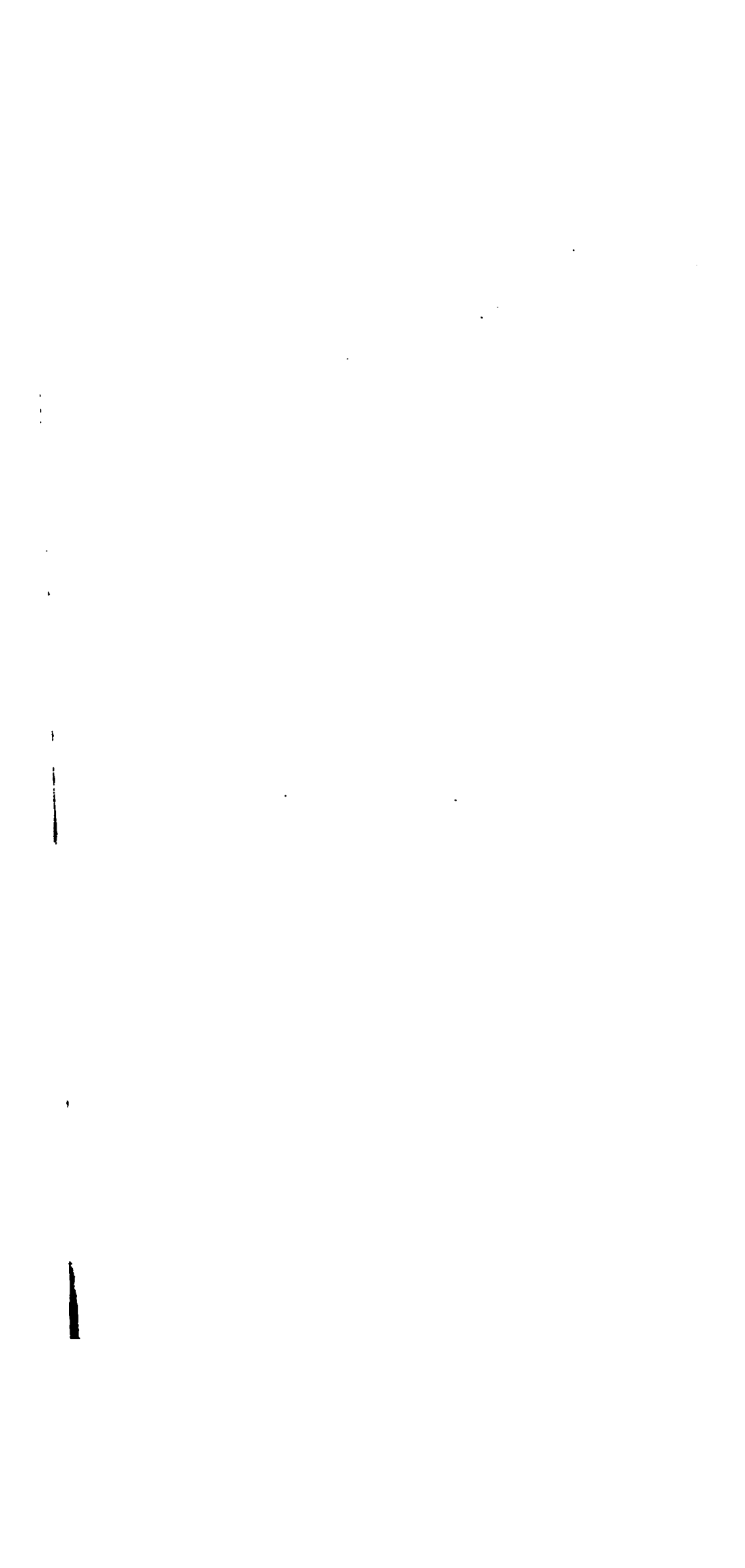
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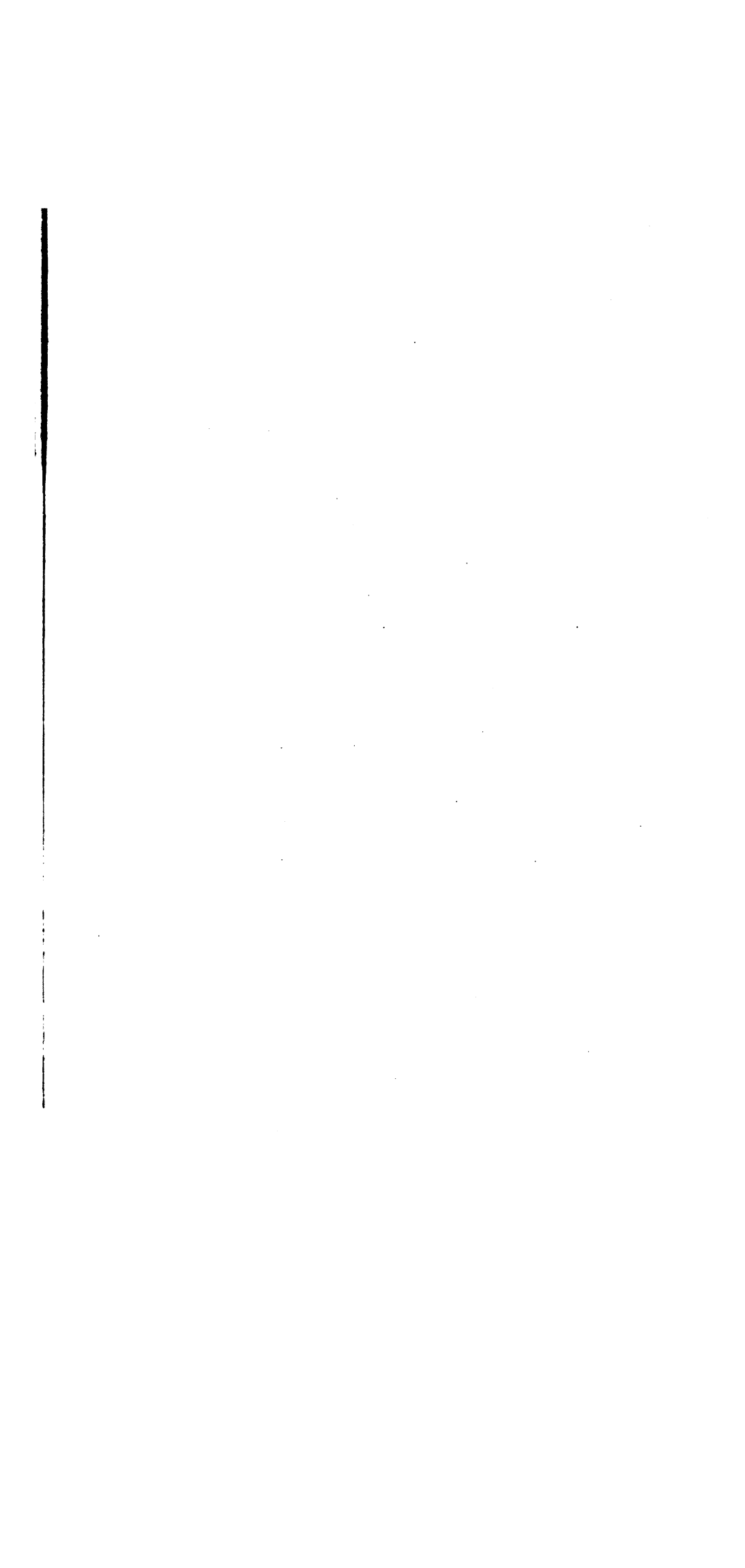
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SUBJECTS.

	Page.
European Opinion on the War. (<i>Comment.</i>)	1
Financial Possibilities and Perils. (<i>Comment.</i>)	3
The Constitutionality of Labor Legislation. (<i>Comment.</i>)	5
The Cuban Revolt and the Constitution. <i>Edward B. Whitney.</i>	8
Ancient and Modern Hindu Gilds, I. <i>E. Washburn Hopkins.</i>	24
Bank Clearings, Interest Rates and Politics. <i>Charles E. Curtis.</i>	43
Two Plans for Currency Reform. <i>Alfred L. Ripley.</i>	50
The Concentration of Industry in the United States. <i>William F. Willoughby.</i>	72
Pantaleoni's Inaugural Address. (<i>Note.</i>)	95
City Farm Training Schools. (<i>Note.</i>) <i>Tolman, Tabor, Dawe.</i>	95
Stability of Prices. (<i>Note.</i>)	97
Demand and the Ratio. (<i>Note.</i>) <i>F. E. Woodruff.</i>	99
Demand and the Ratio. (<i>Note.</i>)	101
The George Junior Republic. (<i>Note.</i>)	102
The Scope and Method of the Twelfth Census. (<i>Note.</i>)	103
Statistical Methods. (<i>Note.</i>)	103
Gold in Circulation. (<i>Note.</i>)	105
Imperialism, True and False. (<i>Comment.</i>)	121
Administrative Problems of an Imperial Policy. (<i>Comment.</i>)	124
State Railroad Purchase in Switzerland. (<i>Comment.</i>)	126
The Present Status of Cotton and Cotton Manufacturing in the United States. <i>Edward Atkinson.</i>	129
The Essay of Malthus: A Centennial Review. <i>Frank A. Fetter.</i>	153
Some Economic Consequences of the Liberation of Cuba. <i>G. Kingsley Olmsted.</i>	168
Labor Crises and their Periods in the United States. <i>Henry W. Farnam.</i>	180
Ancient and Modern Hindu Gilds, II. <i>E. Washburn Hopkins.</i>	197
The National Municipal League. (<i>Note.</i>) <i>Clinton R. Woodruff.</i>	213
The Alaskan Gold Fields. (<i>Note.</i>)	216
Economic Aspects of the Liquor Problem. (<i>Note.</i>)	217
E. A. Angell. (<i>Note.</i>)	218
Gold Contracts in the United States. (<i>Note.</i>)	219
The Scope and Effect of the Anti-Trust Act. (<i>Comment.</i>)	241
David Ames Wells. (<i>Comment.</i>)	245
The Coin Shilling of Massachusetts Bay, I. <i>William G. Sumner.</i>	247
Industrial Democracy. <i>John Graham Brooks.</i>	265
Dominion Politics in 1898. <i>Edward Porritt.</i>	281
The Tinplate Industry. <i>Frank L. McVey.</i>	302
Railway Receiverships in the United States: their Origin and Development. <i>John F. Crowell.</i>	319
British Legislation in the Session of 1898. (<i>Note.</i>) <i>Edward Porritt.</i>	331
Recent Historical Monographs. (<i>Note.</i>)	337

Contents.

v

	Page.
Some New Editions, Reprints, etc. (<i>Note.</i>)	339
Statistics of the Vocations of College Graduates. (<i>Note.</i>)	341
The Government of Alien Races by the United States. (<i>Comment.</i>)	357
Imperialism and the Constitution. (<i>Comment.</i>)	358
The Proposed Plan for the Government of the Hawaiian Islands. (<i>Comment.</i>)	360
The Economic Association and the Twelfth Census. (<i>Comment.</i>)	361
✶ The Socialistic Municipalities of Northern France. <i>Leo S. Rowe.</i>	363
Dynamic Standard of Wages. <i>John B. Clark.</i>	375
Value and its Measurement. <i>D. I. Green.</i>	383
The Coin Shilling of Massachusetts Bay, II. <i>William G. Sumner.</i>	405
Workmen's Compensation Acts. <i>M. F. Tyler.</i>	421
Denmark and its Aged Poor. <i>A. W. Flux.</i>	434
Rotten Boroughs of Old and New England. (<i>Note.</i>) <i>Edward Porritt.</i>	449
Some Recent Books on Our New Possessions. (<i>Note.</i>)	455
A New Volume on the Liquor Problem. (<i>Note.</i>)	456

WRITERS.

	Page.
ATKINSON, EDWARD. The Present Status of Cotton and Cotton Manufacturing in the United States.	129
BROOKS, JOHN GRAHAM. Industrial Democracy. (<i>Note.</i>)	265
CLARK, JOHN B. Dynamic Standard of Wages.	375
CROWELL, JOHN F. Railway Receiverships in the United States: their Origin and Development.	319
CURTIS, CHARLES E. Bank Clearings, Interest Rates and Politics.	43
FARNAM, HENRY W. Labor Crises and their Periods in the United States.	180
FETTER, FRANK A. The Essay of Malthus: A Centennial Review.	153
FLUX, A. W. Denmark and Its Aged Poor.	434
GREEN, D. I. Value and its Measurement.	383
HOPKINS, E. WASHBURN. Ancient and Modern Hindu Gilds.	24, 197
MCVEY, FRANK L. The Tinplate Industry	302
OLMSTED, G. KINGSLEY. Some Economic Consequences of the Liberation of Cuba.	168
PORRITT, EDWARD. British Legislation in the Session of 1898. (<i>Note.</i>)	331
———, ———. Dominion Politics in 1898.	281
———, ———. Rotten Boroughs of Old and New England. (<i>Note.</i>)	449
RIPLEY, ALFRED L. Two Plans for Currency Reform.	50
ROWE, LEO S. The Socialistic Municipalities of Northern France.	363
SUMNER, WILLIAM G. The Coin Shilling of Massachusetts Bay.	247, 405
TOLMAN, TABOR, DAWK. City Farm Training Schools. (<i>Note.</i>)	95
TYLER, MORRIS F. Workmen's Compensation Acts.	421
WHITNEY, EDWARD B. The Cuban Revolt and the Constitution.	8
WILLOUGHBY, WILLIAM F. The Concentration of Industry in the United States.	72
WOODRUFF, CLINTON R. The National Municipal League. (<i>Note.</i>)	213
WOODRUFF, F. E. Demand and the Ratio. (<i>Note.</i>)	99

PUBLICATIONS NOTICED AND REVIEWED.

	Page.
ATKINSON, E. Cheap Cotton by Free Labor. (<i>E. Atkinson.</i>)	128, 135
BODLEY, J. E. C. France. (<i>J. W. Jenks.</i>)	220
CANNAN, E. Production and Distribution. (<i>F. A. Fetter.</i>)	155, 157
Census, Eleventh, On Manufactures. (<i>E. Atkinson.</i>)	148 & ss.
COHN, G. Nationalökonomie des Handels und des Verkehrswesens. (<i>A. T. H.</i>)	351
DAVIDSON, J. Bargain Theory of Wages. (<i>I. F.</i>)	110
DESTREE, J. & VANDERVELDE, E. Socialisme en Belgique. (<i>W. F. B.</i>)	235
DUNNING, W. A. Civil War and Reconstruction. (<i>F. Strong.</i>)	114
The Federalist, edited by P. L. Ford. (<i>C. H. Smith.</i>)	237
Gage Bill: Dec. 16, 1897. (<i>A. L. Ripley.</i>)	50
GARDINER, S. R. History of the Commonwealth and Protectorate. (<i>F. Strong.</i>)	107
GEORGE, HENRY. Political Economy. (<i>A. T. H.</i>)	231
GIDDINGS, F. H. Elements of Sociology. (<i>W. F. B.</i>)	339
GODKIN, E. L. Unforeseen Tendencies of Democracy. (<i>N. T. Bacon.</i>)	346
HADLEY, A. T. Economics. (<i>F. A. Fetter.</i>)	158
Handwörterbuch der Staatswissenschaften, Suppl. Bd. II. (<i>H. W. F.</i>)	239
HENDERSON, C. R. Social Elements. (<i>Note.</i>)	340
———, ———. Social Spirit in America. (<i>Note.</i>)	340
HOBBS, Ethics of, edited by E. H. Sneath. (<i>W. F. B.</i>)	236
HOOGKAA, Reportorium op de Koloniale Litteratur. (<i>Comment.</i>)	125
Indianapolis Monetary Commission, Report. (<i>A. L. Ripley.</i>)	50
LEVASSEUR, E. L'Ouvrier Américain. (<i>H. W. F.</i>)	354
LORD, ELEANOR L. Industrial Experiments in British Colonies of North America. (<i>Note.</i>)	338
LORD, ELEANOR L. Industrial Experiments in the British Colonies of North America. (<i>C. J. Bullock.</i>)	463
MALTHUS, T. R. Essay on Population. (<i>F. A. Fetter.</i>)	153 & ss.
MOSES, BERNARD. Democracy in America. (<i>Note.</i>)	340
———, ———. Spanish Rule in America. (<i>F. Strong.</i>)	457
NEWCOMB, H. T. Railway Economics. (<i>A. T. H.</i>)	469
NOYES, A. D. Thirty Years of American Finance. (<i>J. C. S.</i>)	112
PANTALEONI, M. Différences d'opinions des économistes. (<i>Note.</i>)	95
———, ———. Pure Economics. (<i>J. M. Gaines.</i>)	352
PEARSON, K. Chances of Death. (<i>I. F.</i>)	224
PHILLIPS, W. A. War of Greek Independence. (<i>T. D. Goodell.</i>)	110
REDWAY, W. F. The Monroe Doctrine. (<i>Note.</i>)	338
REEVE, HENRY, Memoirs of, by J. K. Laughton. (<i>E. Porritt.</i>)	459
RICHARDSON, O. H. National Movement in the Reign of Henry III. (<i>W. J. Lowe.</i>)	231
ROUSIERS, PAUL DE. Trusts. (<i>W. B. Bailey.</i>)	465
SAYOUS, A. E. Bourses Allemandes. (<i>A. T. H.</i>)	229

	Page.
SMITH, T. C. The Liberty and Free Soil Parties in the Northwest. (<i>Note.</i>)	338
SOMBART, W. Socialism in the XIXth Century. (<i>Note.</i>) . . .	340
——, —. Socialisme au XIXe siècle. (<i>W. F. B.</i>) . . .	234
STARK, F. R. Abolition of Privateering. (<i>T. S. Woolsey.</i>) . . .	228
STEIN, L. Die sociale Frage. (<i>W. F. B.</i>) . . .	115
TURGOT, Formation and Distribution of Riches, edited by W. J. Ashley. (<i>H. W. F.</i>) . . .	238
WARD, L. F. Outlines of Sociology. (<i>Note.</i>) . . .	339
WAXWEILER. Participation aux bénéfices. (<i>N. P. Gilman.</i>) . . .	467
WEBB, SIDNEY AND BEATRICE. Industrial Democracy. (<i>J. G. Brooks.</i>) . . .	265
WILSON, W. The State. (<i>Note.</i>) . . .	339
YULE's Theory of Correlation. (<i>Note.</i>) . . .	103
ZENKER, E. V. Anarchism. (<i>W. F. B.</i>) . . .	108

THE
YALE REVIEW.

MAY, 1898.

COMMENT.

*European Opinion on the War; Financial Possibilities and Perils;
The Constitutionality of Labor Legislation in the
United States.*

SINCE the publication of our last number, the war with Spain, which seemed then a remote possibility, has actually begun. Any discussion of its justification, or any rehearsal of the long series of events which finally led to the rupture, would now have an historical interest only. But the attitude of European nations towards it may affect both the course of the war and the conditions of peace and has therefore a practical bearing upon current events.

The general tone of English public opinion is as pleasant as it is surprising. The English press as a body credits us with humane motives, and holds that we are within our rights in waging war. Not that this view is unanimous. The sections of the press and the public which were most bitter against the north in the days of secession, now favor the cause of Spain. Aristocratic organs like the *Morning Post* or the *St. James's Gazette* still "prefer Castile to Connecticut," the appearance of self-respect to the reality. Ultra-Conservative journals in the north of England, which regarded the civil war as a tariff squabble, still scout the idea that considerations of humanity have any weight in the actual conduct of affairs. But these people no longer represent English public opinion. A generation ago, those who sympathized with American national aspirations hardly had a foothold in English society; now they domi-

nate it. For perhaps the first time in a great crisis, the *London Times* is with us.

Part of this change is perhaps due to international conditions. England feels herself without an ally in Europe, and is correspondingly anxious for coöperation in America—just as she was in Canning's day. But a larger part is due to the increasing democratization of English public sentiment. In the contest between democracy and flunkayism, the influence of men like Mill and Bright has finally won a victory. In Germany, on the other hand, the course of events has been the reverse of that which has prevailed in England; and Germany's attitude to us has become less friendly instead of more so. The German spirit is far less democratic than it was a generation ago; and this movement of German thought has led German public opinion, such as it is, to sympathize with the divine right of other kings besides the German Emperor; to support the Turk in his dealings with the Armenian and the Cretan, to condone the oppressions of the Spaniard in Cuba and make light of attempts to remedy them. Add to this the fact that Germany has become a trading and money-making country, and is brought into keener commercial rivalry with America, and there is no wonder the German press and public, with scarcely an exception, are quite ready to accept a distorted version of facts and motives.

It might at first sight seem as though France with her change from an imperial to a republican form of government, would be less hostile to us as a nation than she was in the Civil War. But, in the first place, France is not a republic in the sense in which that name is applied to the United States. France, it is true, has no king; but her administration is bureaucratic to the last degree. The Zola trial may serve as an instance of the remoteness of modern France from liberal ideas as understood by English-speaking peoples. In the next place, the Americans whom the French have seen in Paris have not always been the most favorable specimens of what our country can produce. We are thought by the large section of the Parisian public which takes the *Figaro* for its gospel, to be a nation of *nouveaux riches*, spoiled children of fortune, quick to

ape the vices of Paris, and incapable of appreciating its virtues. Finally—and this counts for most of all—France regards herself as the leader and champion of the Latin civilization against the Saxon. France is interested in supporting the credit of Spain, not only financially but morally. The more England and America draw together, the more does France draw apart from both. France and England have for centuries represented two kinds of morality so different that each has at times been prone to deny all morality to the other. Most Frenchmen find it difficult to believe that our sympathy for Cuba is more than a pretense under which to cloak our greed of self.

There will be one way to prove them wrong; that way is, to decline to annex territory as the result of the war. If we do this, we shall furnish an object lesson in international morality which will be worth many times what the war costs. If we do this, we shall gain the respect of other nations for our motives; and shall give, to any Anglo-American coalition which the future may have in store, a standing and influence greater than that which belongs to its physical power alone. Of such a coalition the circumstances which have thus far attended the conduct of the war bear no little promise. We may hope that, as the result of these disturbances, we can secure a permanently better feeling toward nations like England, which understand us; and increased respect for our disinterestedness on the part of other nations which do not understand us so well. These are ends in whose pursuit men of all parties and opinions can coöperate.

Not the least important of the national problems which the war has crowded upon us is that of ways and means. This is not because any danger exists of lack of funds, but because of the effect for good or for evil which our financial measures must leave behind them. If, as the Senate Finance Committee recommend, greenbacks and "coining the seigniorage" are substituted for bonds, the dangerous precedent, established in the civil war, of issuing government currency in time of financial

pressure and maintaining or extending it when that pressure is over, will have gathered new and almost resistless strength. The proposed increase of internal revenue, on the other hand, revives the possibility of ultimately modifying our federal system of taxation in that direction. The occasional efforts to pass an income tax or to submit to the State legislatures an amendment to the constitution legalizing an income tax not levied in proportion to the population of the States, may possibly have consequences of a far-reaching character. Such a change might lead to a more scientific and equitable tax system, but it would afford a long-wished opportunity for experiments in socialistic taxation.

The financeering of our last war supplied us with public questions for a generation. High war duties called into being new industries which soon gathered sufficient political strength to maintain themselves permanently. In the same way, the civil war greenbacks produced political champions, who have successfully resisted their retirement. We are now confronted with the momentous problem whether these abuses of tariff and currency are to be stereotyped and perpetuated or arrested and corrected. Since "coining the seigniorage" means issuing treasury notes to correspond to certain idle silver in the treasury, and since treasury notes are in practice redeemed only in gold and not in silver, the effect is simply paper inflation. The treasury notes are greenbacks under a different name. The proposed issue of treasury notes under the fiction of "coining the seigniorage" would mean simply an addition to the proposed \$150,000,000 of greenbacks, and the two form together a formidable attack on our financial stability. If they should not be followed by a premium on gold, their advocates will use their apparent safety as an argument for further issues until a gold premium *does* appear. The present is the opportunity for gold men to take a decided stand. We are at the parting of the ways between sound and wildcat financiering.

Our new tax measures increasing the taxes on tobacco, beer, and other beverages are steps in the right direction. They should encourage the tariff reformer to work for their retention after the war is over, and to secure a corresponding reduction

in protective duties. Our new relations with Cuba may put the question of sugar taxes and bounties in a very new light, and lessen to some extent restrictive tendencies. Expanding trade in the East may work in the same direction. Greater wealth and greater power will, however, put increased responsibilities upon our Congress and our voters. Under such conditions ignorance or party spirit at home may yet prove as serious a danger as the armada of Spain or the yellow fever of Cuba, and to conquer these will be a moral victory as great as any that may be won by our army or navy.

[Under our constitution, the general right to legislate with regard to the conditions and hours of labor belongs to the States] As a consequence, there has been little uniformity in this important department of law. None of our States have gone as far as the leading states of Europe, in the direction of protecting certain classes of persons, especially women and children, from overwork, or of protecting certain callings from the special dangers incident to them. Many States have done but little in this respect. This confusion of legislation which has been worse confounded, however, by the fact that the interpretation of such laws usually belongs to the State courts, and that many laws passed by the States have been overthrown by their own courts on the ground of unconstitutionality, while similar ones have been sustained in other States. Thus, laws forbidding barbers to work on Sunday have been declared to be unconstitutional in California, Missouri and Illinois, though valid in New York. Laws restricting the hours of labor of women and children have been overthrown in Illinois, though upheld in Massachusetts.

Though these decisions have been rendered by State courts, they have often been based upon broad grounds. Thus the Illinois law of June 7, 1893, which provided that women should not be employed in any factory or workshop more than eight hours a day, or forty-eight hours a week, and which appropriated \$20,000 for the salaries of factory inspectors, was overthrown on the ground that it was class legislation, and that it

was "a purely arbitrary restriction upon the fundamental right of the citizen to control his or her own time and faculties." It was, therefore, a violation of Section 2 of the Constitution of Illinois, which provides that "no person shall be deprived of life, liberty or property without due process of law."

In Nebraska, a law passed in 1891, providing that eight hours should "constitute a legal day's work for all classes of mechanics, servants and laborers throughout the State of Nebraska, excepting those engaged in farm and domestic labor," and imposing a fine upon any employer who should evade these provisions, was declared invalid by the Supreme Court of Nebraska in 1894, on the double ground that it denied freedom of contract and that it was class legislation.

In 1895, the opinion of the Supreme Court of Colorado was asked by the Legislature with regard to a bill limiting a legal day's work to eight hours, and also with regard to an amendment, confining this limitation to laborers employed in mines, factories and smelters. The court held that both provisions would be unconstitutional, as violating the right of parties to make their own contracts, "a right guaranteed by our Bill of Rights and protected by the fourteenth amendment to the Constitution of the United States."

Thus the Colorado decision bases itself in part on the Constitution of the United States, while the Illinois decision rests upon a clause of the State constitution, which is identical in form with part of the fourteenth amendment to the Constitution of the United States.

The decision of the Supreme Court of the United States in the case of *Holden vs. Hardy*, which was rendered February 28, 1898, marks a great advance upon these decisions, partly from the fact that it is the decision of the highest tribunal of the country, and partly because of the broad and liberal interpretation given to the law. This decision turned upon the constitutionality of a statute of Utah, which limited the day's labor in mines, smelting works, etc., to eight hours, and made a violation of the law a misdemeanor. The law was similar in its terms to the Colorado bill. It was contested on the ground that it deprived the defendant of the right to make contracts,

that it was class legislation, that it deprived the defendant of the equal protection of the laws, abridged the privileges and the immunities of a citizen of the United States, and deprived him of his property and liberty without due process of law. The Supreme Court, in sustaining this law, took the ground that "law is, to a certain extent, a progressive science; that in some of the States methods of procedure which, at the time the Constitution was adopted, were deemed essential to the protection and safety of the people or the liberty of the citizen, have been found to be no longer necessary; that restrictions which had formerly been laid upon the conduct of individuals, or of classes of individuals, had proved detrimental to their interests; while, upon the other hand, certain other classes of persons, particularly those engaged in dangerous or unhealthful employments, have been found to be in need of additional protection.

* * * * Of course, it is impossible to forecast the character or extent of these changes, but in view of the fact that from the day Magna Charta was signed to the present moment, amendments to the structure of the law have been made with increasing frequency, it is impossible to suppose that they will not continue, and the law be forced to adapt itself to new conditions of society, and, particularly, to the new relations between employers and employees as they arise." The court accordingly held that the law was a legitimate exercise of the police power, and that it was not in violation of the Constitution of the United States.

This decision cannot fail to have a material effect upon State legislation and State decisions in the future. It will, of course, not be binding upon States whose laws do not come up for interpretation before the Supreme Court, and when a State law is overthrown by its own court, removal to the Supreme Court is excluded. But it will be surprising if it does not decidedly influence the future opinions of State judges and bring the western States, in which protective legislation has hitherto been most uniformly overthrown by the courts, into line with the eastern States, like Massachusetts and New York, in which such protective legislation has been upheld.

THE CUBAN REVOLT AND THE CONSTITUTION.

IN June, 1895, soon after the present Cuban war commenced, President Cleveland recognized the existence of the insurrection and proclaimed the neutrality of the United States. By this step our so-called neutrality laws were put into operation, both as against the Cubans and as against the Spaniards.¹ The operation of these statutes would have been in no wise different had the insurgents been recognized even as an independent state. They were, however, most anxious to be recognized as such. This would doubtless have aided the sale of their bonds, and perhaps would have embroiled us at once with Spain, thus indirectly assuring the result which they were fighting to attain. But to recognize a body as independent is simply to say that it is so; and to say that it is so when it is not so is to tell a lie. The Cubans were not independent, although we wished that they were, and hoped that they would get to be. The President had no right to tell a lie in the name of the American nation, and did not. Nor was there any reason for recognizing "belligerency." He had already recognized that a war was being waged, and that the insurgents were not mere bandits or rioters. They had no territorial or military contact with the United States, no seaports, no navy, no privateersmen. Spain, on the contrary, had seaports and a navy. For reasons of her own she preferred not to have the Cubans recognized as belligerents, technically speaking; but if we had done so, she could have exercised against our vessels the right of visitation, search, and seizure of contraband articles on the high seas, while we would have forfeited the right to complain of the war's injuries to the property of our citizens on the island. A recognition of belligerency is a detriment to the neutral, which should be

¹ *The Three Friends*, 166 U. S. 1, decided by the Supreme Court of the United States, March 1, 1897. The opinion and arguments in that case discuss the nature and effects of recognition of belligerency.

avoided if possible. It is of material advantage only to a belligerent with whom the neutral comes actually in contact, on land or sea.¹

Hence President Cleveland and his successor, up to the time when our own war with Spain brought us into practical alliance with the insurgents, gave them recognition neither of "belligerency" nor of independence. The reasons, however, were not understood by most of our people, who were misinformed on the legal aspects of the question. Many, moreover, were anxious to provoke the war between ourselves and Spain as soon as possible. The agitation was taken up in Congress, and both Houses at the session of 1895-6 passed a resolution expressing their opinion in favor of recognizing belligerency. In the following December a resolution actually declaring the independence of the Cubans, and offering mediation, was introduced and pressed in the Senate. It was met with a quiet statement from Mr. Olney, the Secretary of State, that such a resolution would only express the individual opinions of the gentlemen who should vote for it, and would have no legal effect, since the recognition of independence of a new foreign state is an executive and not a legislative act. The statement precipitated a constitutional debate and the journalistic and senatorial attacks upon the Secretary were hot; but they subsided rapidly upon the production of the precedents upon which he relied,² and the resolution was dropped. The controversy of 1898, when a large party in Congress attempted to take the whole jurisdiction over foreign relations out of President McKinley's hands, is still fresh in memory. We have seen enough of Presidential and Congressional diplomacy, of their differences in method and effect, to realize the very great importance of the constitutional question, how far the President's power reaches in foreign affairs, and how far Congress

¹ The alliance now (May 2) projected with Gomez' troops will doubtless involve a recognition of belligerency.

² See the two memoranda prepared in the executive departments and presented by Senator Hale (*Sen. Docs.*, 54th Congr., 2d Session, Nos. 40, 56); also speech of Senator White, February 25, 1897, and of Senator Spooner, April 15, 1898.

has concurrent or superior jurisdiction. Had Congress the right to recognize Cuban belligerency? Had it the right to recognize Cuban independence? Had it the right to direct the course of diplomatic correspondence, and decide when the *ultimatum* should be sent?

It must be remembered that the Federal Constitution was built upon the theory, long accepted as gospel by our statesmen, that the best form of government is one in which the three great branches, legislative, executive and judicial, are entirely independent of one another. One is to legislate, another to administer, the third to adjudicate. Neither is to direct the other. The powers of sovereignty are to be so distributed between them that there shall be no duplication, no concurrent jurisdiction, which might give rise to possible deadlocks and disputes. The theory is not always satisfied in practice, but as a general rule whatever power is granted to the executive branch is denied to the legislative, and *vice versa*; and certain it is that whatever power either derives from the Constitution is independent, and is not subject to direction from the other.

The Constitution does not confide the whole subject of foreign affairs, or of diplomatic negotiations, in express language to either branch of the Government, but leaves the matter to implication from its express provisions. It empowers the legislative branch to regulate commerce with foreign nations, to define and punish piracies and offenses against the law of nations, to declare war, to grant letters of marque and reprisal, and to make all laws necessary to carry into execution any of these powers, or any of the other powers vested in the government of the United States, or in any department or officer thereof. It empowers the Executive—the President—with the advice and consent of the Senate, to make treaties, and to appoint ambassadors, other public ministers and consuls. It empowers him to receive ambassadors and other public ministers.

Diplomatic negotiations are conducted by ambassadors and other public ministers, and in rare instances by special commissioners. The President's authority to send and receive these officials is absolutely independent of the legislature. It

is limited only to the extent of requiring the confirmation by the Senate of his nominations, the Senate thus acting in its executive capacity. Congress can indeed exercise great influence through its power of appropriating money; but though it refuse to appropriate for the office, the President and Senate can send an ambassador if one is to be found who will go without salary and pay for his own outfit.

The highest result of diplomatic negotiations is a treaty; and the power to make treaties is also absolutely uncontrolled by Congress, the President acting with the Senate in its executive capacity. Yet a treaty is part of the supreme law of the land. It is of equal rank with an act of Congress. A statute abrogates a prior treaty with whose provisions it conflicts, but a treaty has equal power over a prior act of Congress. Thus a tariff duty on some article may have been intended by Congress to be the corner-stone of our revenue system, yet the article may be transferred to the free list by the action of the President and Senate in making reciprocity treaties with the countries from which it is imported. So our anti-Chinese legislation could be repealed by a new treaty with China. The President and Senate can do things by treaty which Congress cannot do by statute. Congress cannot modify the alien laws of a State; but a treaty with a foreign nation can give its citizens equal privileges with our own. By a treaty, without consulting the House of Representatives, we surrendered Texas in 1819, part of Maine in 1842, and British Columbia in 1846. While the first of these treaties was pending, Henry Clay introduced in the House a resolution reciting that, as Congress has power to dispose of our territory, no treaty to alienate any portion of it is valid without the concurrence of Congress; but upon opposition it was dropped.

Diplomatic business not relating to treaties consists partly in negotiating informal compacts of similar nature, and for the rest in such work as the collecting and giving of information, requests for protection of our citizens, assisting them in the protection of their personal and property rights, and procuring for them social introductions. None of these acts are legislative in character. Diplomacy, therefore, is a matter entirely

entrusted to the President's responsibility; while at the same time it is eminently proper that he should ask the opinion of Congress before any step is taken which might require large appropriations, or which might decrease the revenue of the government, or which might lead to war. It has been customary for Congress to give its advice in the form of a resolution; but sometimes it has been put in the form of a statute. Thus Congress has advised the President to make reciprocity treaties upon a certain basis with foreign countries. This advice is conveyed in the form of a statutory provision authorizing him to do so, but the statute conveys no authority to him, since his treaty-making power is conferred by the Constitution, and is unlimited. Still the provisions are very valuable as assuring him the moral support of Congress, without which he ought not to make such radical changes in our revenue laws.

Among the exceptional cases in which the President ought to obtain the advice of Congress before taking any final steps, are those negotiations which may lead to war. War must be declared by Congress. It requires large appropriations and much legislative action. Before the President takes any step which might constitute a *casus belli* he should ask and obtain legislative approval. This was done in April, 1898, by President McKinley as a necessary preliminary to his threat of armed intervention in Cuba.

The "recognition of belligerency" and "recognition of independence," which have been so much discussed within the past three years, are in their essence judicial acts. They are simply decisions, upon evidence duly presented, that belligerency or independence exists as a fact. The judiciary, however, for various practical and political reasons, refuse to take evidence and decide the question for themselves. It would often be absolutely impracticable to take the necessary evidence as to occurrences in foreign lands. It would also be most impolitic to exercise a jurisdiction which might bring the judges into collision with the executive government and bring the United States into collision with a foreign power. The judiciary, therefore, have always looked to the executive department of the government

for information upon this point; and when the executive department finds and announces that belligerency or independence exists, then, and not until then, does the judiciary find the same.

Belligerency can indeed be recognized also by Congress, as through its powers to declare war and to define piracies. If war were declared against the Cuban insurgents, that would recognize their belligerency at once. So, if the insurgents put privateers upon the ocean, Congress could legislate that they be not treated as pirates. Ordinarily, however, recognition must come from the executive; and I believe that never up to this time has there been a legislative recognition.

I have never seen a tenable suggestion of any method by which the independence of a foreign country could be constitutionally recognized by a legislative act. An appropriation act might provide for the pay of a minister to the new state; but it would lie with the President whether to appoint him, and the effect of the appropriation would be simply that the President, when deciding to recognize, would have ready money to open diplomatic relations. It has been suggested that recognition could be made under the war power; but declaring war against a people recognizes them only as belligerents. We admitted all through the late Civil War that we were at war with the Confederates, but we never recognized them as independent. By its very definition a recognition of belligerency is a recognition that the belligerents constitute a state for all purposes of the war.¹

Similar reasoning will show that Congress cannot recognize the independence of a foreign country under its power to define piracies or offences under the law of nations. It has been suggested that Congress may recognize independence through its right to regulate commerce. That would be the case if it had the right to recognize commerce by treaty, but it has not. Independence of a foreign country is not recognized by any statute regulating trade with it. Thus we have long had statutes regulating trade with the Dominion of Canada, with

¹ Lawrence, *International Law*, §162; Hall's *International Law*, 4th Ed., p. 32; *The Estrella*, as explained at 166 U. S., pp. 57-8.

the colonies of New Brunswick, Nova Scotia, Newfoundland and Prince Edward Island, and even with the single city of Chihuahua in Mexico. Nor can such a right be inferred from the fact that its exercise by the President might lead to war. If that argument were good, it would follow that the President has no right to recognize a new foreign state; but that right has been conceded to him, and has been exercised by him without question, in a very large number of cases during the past hundred years. There are many ways in which acts of the executive department might provoke a declaration of war from a foreign country. Circumstances are even conceivable in which the judiciary, or one of the States of the Union, might provoke hostilities.

The President, however, is expressly given power to recognize independence of a foreign country in the most usual and proper method of performing that act, namely, by receiving an ambassador, foreign minister or consul.

Recognition is sometimes effected by the President and Senate in sending a minister, or by the President in sending a commissioner, or, in case the new power is simply the successor of one previously recognized, as upon the revolutions in France, Brazil and Hawaii, by instructing the resident minister to maintain diplomatic relations with the new government.

The political situation during the last years of the great Spanish-American revolution was similar in many respects to that which existed during the three years before the breaking out of the present war with Spain. Then, as of late, the President was the conservative force, sympathizing indeed with the people of the United States in their strong desire for the success of the revolutionists, but impressed with the responsibility imposed by his oath of office, anxious to observe the duties of neutrality, and determined not to recognize the independence of the Spanish colonies until the moment when the independence was an assured fact. Then, as of late, a strong party in Congress was determined to force the President's hand if possible, and to do everything which could be done by the legislative branch of the government to secure it instant recognition. The President was James Monroe. The leader

of the radicals in Congress was Henry Clay. Many of the men who assisted in establishing the Constitution were then still living, and every resource of ingenuity was exhausted in inventing some method of accomplishing the desired end by legislative action. The history of these preliminary contests is, therefore, most significant.

The revolutions commenced in 1810. They met with great success, although with occasional reverses. They were not confined to the interior of the country, but the insurgents held seaports and maintained many privateers and merchant vessels upon the seas, sailing under many new flags. The present Argentine Republic,—then officially called the United Provinces of South America and generally known by the name of its metropolis, Buenos Ayres,—was free from Spanish control after 1812, although it did not declare independence until 1816. New Granada and Venezuela were held by the patriots for a large part of the time after 1815, and from 1819, when Bolivar entered Bogotá, the Spaniards held but little ground. Chili was reconquered by the patriots early in 1817, and remained pacified, except one minor seaport, after April, 1818. By his annual message of December, 1817, President Monroe announced that the belligerency of the principal insurgent governments had been recognized. Mr. Clay was not satisfied, and projected a motion to acknowledge the government of Buenos Ayres and perhaps Chili. This motion was never actually made, and his subsequent course shows that in all probability it was dropped on account of the constitutional inability of Congress to adopt it. On March 24, 1818, when the house was in Committee of the Whole upon the appropriation bill, Mr. Clay moved an appropriation for a minister to the "independent provinces of the River Plata in South America" (meaning the Buenos Ayres government). This would involve the assertion by Congress of the right to acknowledge the independence of this province; but upon the following morning Mr. Clay redrafted his amendment, striking out the word "independent," and providing that the appropriations should be available "whenever the President shall deem it expedient to send a minister to the said United Provinces." In support

of this, Mr. Clay said "that, without unconstitutional interference with the executive power, with peculiar fitness we might express in an act of appropriation our sentiments, leaving him to the exercise of a just and responsible discretion." Even in this form the resolution was opposed by John Forsyth, the Chairman of the Committee on Foreign Affairs, and by William Lowndes, one of our greatest parliamentarians and then the leader of the house; the latter maintaining that "it is the exclusive right of the executive to manage our foreign relations," and that "we should present a single front," since the President only can communicate, negotiate and treat with foreign nations, so that the initiative should be left to him. Mr. Clay made two great speeches in support of his resolution, but it was defeated by seventy votes. On May 20, 1820, he succeeded against the opposition of Mr. Lowndes, and by a majority of five, in passing a resolution through the House declaring the expediency of the appropriation for such ministers or minister as we "may send to *any* of the governments of South America which have established and are maintaining their independence of Spain." The matter went no further. On February 9, 1821, he made a similar motion, which was defeated by seven votes. On the following day he introduced a resolution declaring the sympathy of the House with the South American revolutionists, and "that it will give its constitutional support to the President of the United States whenever he may deem it expedient to recognize the sovereignty and independence of any of the said provinces." This resolution he carried after a speech in which he declared that he "concluded that both Congress and the executive had this power, but that the most regular, ordinary and usual course was by the executive; and it was, therefore, proper to assure him of the support of this House." His reason for supposing that Congress had the power is not disclosed. The committee to lay this resolution before the President was politely received by him with the declaration that he would take it "into deliberate consideration, with the most perfect respect for the distinguished body from which it had emanated." Meanwhile President Monroe had sent commissioners to South America to inquire into the

real state of affairs there. He had postponed active measures until his treaty with Spain for the acquisition of Florida and confirmation of our right to Oregon had been assured. The struggle of Spain had become hopeless, and at last on March 8, 1822, nearly twelve years after the commencement of the struggle, he sent a message to Congress stating that in his opinion the time had come to recognize these republics, and asking an appropriation for the salaries and outfits of the ministers. The House adopted resolutions stating that it concurred in his opinion and instructing the Committee of Ways and Means to prepare an appropriation bill accordingly. Recognition was given by his reception of the Columbian minister on June 18, of that year.

In 1836 great excitement had arisen among our people over the revolution in Texas, and Mr. Clay, now a member of the Senate, again took the lead by introducing a resolution that its independence "ought to be acknowledged by the United States whenever satisfactory information shall be received that it has in successful operation a civil government capable of performing the duties and fulfilling the obligations of an independent power; and, while conceding that the President under the Constitution has the charge of our foreign intercourse and ought to take the initiative in an acknowledgment of independence of any new power, said that if "the President should be tardy he may be quickened." The resolution was adopted. Daniel Webster said in the debate that "against a direct recognition he thought there existed strong objections; it was the proper function of the President to take the lead in this matter." Mr. Clay maintained that Congress might recognize independence by a law regulating commercial intercourse; but neither he nor any one else has ever found a way of framing such a law so as to have the desired effect. The House passed resolutions subsequently to the same effect, introduced by Mr. John Y. Mason, the Chairman of the Committee on Foreign Relations; but his report made no claim that Congress had the right to recognize Texas, saying, on the contrary: "By the Constitution of the United States the duty of conducting negotiations and of superintending

our relations with foreign states is devolved on the President." At the following session President Jackson sent a message to Congress in which he stated that it was unnecessary to discuss the constitutional question, for "on the ground of expediency" he thought it better "that the expediency of recognizing the independence of Texas should be left to the decision of Congress." An interesting discussion followed in the House, John Quincy Adams opposing any form of words which would imply that Congress had the right to give recognition. The opposition was successful. An appropriation for a diplomatic agent "to the independent republic of Texas" was changed so that the agent should be sent "to the Republic of Texas whenever the President of the United States shall receive satisfactory evidence that Texas is an independent power and that it is expedient to appoint such a minister." Under this appropriation the agent was actually accredited.

It has been claimed that Congress recognized the independence of Hayti and Liberia in 1862, but the act merely authorized the appointment of diplomatic representatives to these republics, and fixed their rank and pay. It had substantially the same effect as the appropriation for Texas just quoted.

In 1864, the House of Representatives, against the protest of Mr. Blaine, passed a resolution claiming that Congress had the right to prescribe our foreign policy and recognize new powers, and that the President was obliged to respect that policy in diplomatic negotiations. President Lincoln and Secretary Seward took the opposite ground, and the Senate (which up to very recent years has always maintained the prerogative of the executive department, to which in a sense it belongs) paid no attention to the matter.

In 1876 Congress passed a joint resolution requesting the Secretary of State to convey a complimentary message from it to the Republic of Pretoria (the Transvaal); but President Grant vetoed the resolution on the ground that it inadvertently infringed upon the constitutional rights of the executive, saying: "If Congress can direct the correspondence of the Secretary of State with foreign governments, a case very different from that now under consideration might arise, when that

officer might be directed to present to the same foreign government entirely different and antagonistic views or statements."

As Congress and the President have never actually disagreed upon these matters, the question has never been presented to the judiciary for decision; but the great weight of authority, including that of Story, is in favor of the view which, as I have just shown, is sustained by the great weight of parliamentary and executive opinion throughout the first century of our Republic.

The precedent established by Monroe and Jackson should be our guide for the future. As long as the President fails to obtain evidence sufficient to warrant him in recognizing a new foreign power, or as long as he finds it unwise to do so, Congress should remain quiescent; for it has no power or responsibility in the matter, while agitation can only have the effect of straining our foreign relations and injuring the pride of the nation which is endeavoring to suppress the revolt, thus lessening the probability that our sympathy may ultimately be given effect by peaceful means. The President on the other hand, when he thinks that the time has come, or may have come, for recognition of independence, but when there is risk of war, may and should submit the case to Congress, and take no step in that direction without legislative approval—not because the Constitution makes legislative approval requisite, but because good sense and good politics require it.

The wisdom of the Constitution, in entrusting such great authority to the President instead of to Congress, I do not intend here to discuss at length. Certainly experience shows that it makes for peace; and it is argued by many that delicate foreign relations, where a few hasty or ill-chosen words may make the difference between peace and war, can not safely be put in the hands of a body so much under the influence of oratory and of journalism, so apt to be led by persons unskilled in foreign history and character and in international law, whose action can be delayed by a small minority in one house and controlled by a bare majority in either. There are certain special reasons, however, which have always been regarded as conclusive in favor of confining diplomacy to the President and

his confidential advisers, no matter how wise the legislative bodies may be.

One of these reasons is the secrecy of much of the information on which the negotiations must be based. That the President cannot safely divulge it all has been conceded from the earliest times in the formula by which Congress calls on him for the information, excepting from the call so much as may be incompatible with the public interest to repeat. When the Constitution was framed, the President had mainly to rely upon secret reports of Government agents for his knowledge of foreign affairs, which the news bureaus were not well organized to convey. It is less so now; but even in this Cuban insurrection it has been impossible to learn through the press the real state of facts, while the recent consular reports have been of such a character that it was deemed wise not to divulge them until their authors had got away safe from the island.

Still more important is the secrecy with which diplomatic negotiations must be carried on, in order that they may be successful. Above all, the extent of the concessions which the Government would make as a *dernier resort* must be concealed from the foreign state. This will be perceived by any one who has conducted a business transaction, or compromised a lawsuit. If on one side there is an individual who keeps his own counsel, while on the other side is a large assemblage who must debate the intent and method of every step in the negotiations, binding the negotiator by restrictions a copy of which (with a report of the debates) is at once laid upon the adversary's desk, it is easy to see where the advantage lies. On this ground President Washington placed himself when refusing to submit to the House of Representatives his instructions to Jay, saying: "The nature of foreign negotiations requires caution, and their success must often depend upon secrecy; and even when brought to a conclusion a full disclosure of all the measures, demands, or eventful concession which may have been proposed or contemplated, would be extremely impolitic; for this might have a pernicious influence on future negotiations or produce immediate inconveniences, perhaps danger and mischief, in relation to other powers."

It may be vital that the wording of the later diplomatic communications, and especially of the *ultimatum*, be selected with extreme care, in order that the civilized world may see that we are entirely in the right, and our enemy entirely in the wrong. The sympathy of neutral nations is no mere luxury in time of war. The event of the conflict may be determined by their regulations of neutrality, as for instance, in the extent to which they will permit belligerent cruisers to be supplied with coal in their own ports. Moreover, as we have just proved, it is possible for a third party to intervene in a war; and its sympathies as much as its real interests may determine the issue of intervention or non-intervention. Few will deny that a President and Secretary of State will draw more skillful state papers than are ever likely to emerge from a Congressional debate.

Finally, when war is threatening, it is of importance that negotiations should be so conducted as to postpone the outbreak of hostilities until the moment when we are prepared to open them to the best advantage. Preparations must be made for the mobilizing of armies: cruisers, cannon, ammunition, torpedoes, must be bought. Vessels in dry dock must be repaired. Vessels abroad must be recalled. If they are unarmed, time must be allowed to arm them there before the neutral is disqualified by the outbreak of war to render further assistance. Unpreparedness in these respects must not be known to the foreign nations. The President must not say to Congress—that is, to the press of the world,—“I am apparently vacillating and aimlessly procrastinating because part of the navy needs scraping and the rest happens to be in such and such a position with respect to the other party’s torpedo boat destroyers.” If the nation wants its wars to be quick, decisive and successful, Congress must quietly await the President’s own time for action, and then give him its prompt support. Its action should be a simple yes or no, like the Senate’s action on a nomination for office.

The joint resolutions of April 20, 1898, which precipitated the present war with Spain, will be of slight weight as a constitutional precedent, because of the manner of their adoption;

for they were a compromise, satisfactory in form to few of those who passed them. It is of some significance that legislative recognition of the insurgent government in Cuba was defeated, and mainly on the ground that it would be an attempt to exercise a function belonging to the executive.

The declaration that "the people" of Cuba are independent is difficult to construe.¹ It is not intended as a recognition of independence of a new foreign state, as understood by international law; for that proposition was rejected. But it is not permissible to put down anything in an act of Congress as mere rhodomontade, if such a result can be avoided. By familiar legal rules of construction we must find some meaning for the declaration if possible, and a meaning which will make it constitutional and valid. Such a meaning can be found if we treat the next two resolutions² as passed with the knowledge that they would make immediate war with Spain unavoidable—an effect both intended and produced. By that war our citizens have become enemies of all Spanish subjects, so that all contracts between them have become void and all commercial intercourse illegal. Such a result, as far as the Cubans are concerned, Congress might well seek to avoid. The first resolution will perhaps be construed by the courts as introducing an exception in favor of persons residing in the island of Cuba, so that intercourse with them shall remain legal, so far as not interrupted by actual hostilities or by Spanish occupation of their territory.

¹ "Be it resolved,

"First—That the people of the island of Cuba *are, and of right ought to be, free and independent.*" The italicized words were stricken out by the House of Representatives, but restored by the Conference Committee.

² "Second—That it is the duty of the United States to demand, and the Government of the United States does hereby demand, that the Government of Spain at once relinquish its authority and government in the island of Cuba, and withdraw its land and naval forces from Cuba and Cuban waters.

"Third—That the President of the United States be and he hereby is directed and empowered to use the entire land and naval forces of the United States, and to call into the actual service of the United States the militia of the several States to such an extent as may be necessary to carry these resolutions into effect."

The second resolution is undoubtedly unconstitutional, for Congress can not communicate with a foreign nation, nor can it direct the President how to perform his duties. It was entitled to most grave consideration from him, because it expressed the opinion and the wish of both Houses of Congress; but it would have had no legal effect, and no binding force upon him, if he had vetoed it and it had been passed over his veto. His signature added nothing to its legal weight; but his communication to Spain, in which he adopted its words, was valid as his executive act. For the war thus precipitated the President, therefore, is the person constitutionally responsible, just as a general is responsible for strategy which he has directed, even if he has, as against his own opinion, followed the advice of his staff. Whether the opinion and the wish of Congress, and the act of the President, were wise or unwise, timely or untimely, necessary or quixotic, must be left for history to decide. No patriotic American can express now but one sentiment.

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ANCIENT AND MODERN HINDU GILDS.

I.

THE gilds of India can be traced back to about 600 B. C. But it is probable that they are still older, for when they are first mentioned it is as a factor of considerable importance in the state. Nevertheless, although the earliest law-books recognize the authority of the gilds, they do not assign to them so conspicuous a position as does the later law, and we may therefore regard the first six centuries before our era as a period of development in the life of the gilds, when these associations still had much to gain. But what they still lacked they had gained completely by the third or fourth century A. D.; and it is not likely that they ever possessed more power than they did at that time, although they have maintained a very autocratic position down to our own century, and even now in certain districts are practically the rulers of the business world about them.

Unfortunately the oldest texts make no clear statement in respect of the powers of the gilds or of their organization. But their growth in influence may be inferred from two typical rules of the law-books. Gautama, about 600 B. C., says: "Laws of districts, castes, and families, when not opposed to sacred texts, are an authority,"¹ and then adds to this the words: "Ploughmen, merchants, herdsmen, money-lenders, and artisans (are also authority) for their respective classes." Here local usage and the laws of castes still stand preëminent. But

¹ As I cannot quote the original texts (here and in the following passages from the ancient literature) I will comprise in one note most of the references made to my authorities in the order given. G. xi. 20-21 (Vas. i. 17; xix. 7), xv. 18; Y. i. 360; M. viii. 41 (B. i. 1, 2, 3-7), 46; Vas. xvi. 15; M. viii. 219, 221; Brihas. viii. 9. On the possibility of gilds in the Brahmanic period, compare the use of other words for corporations and the early use of the later technical word in TS. iii. 4, 5, 1; AV. i. 9, 3; Ait. Br. iii. 30, 3; Kaushit. Up. ii. 20; and compare the *pūja* and *grāmaydjaka*, G. xv. 16; Mbh. iii. 200. 7; M. iv. 205; iii. 151, 164; Yāj. i. 161, 360; ii. 192; M. iii. 154; V. x. 4. In Buddhistic literature, the following passages: Cullav. v. 8; vi. 1, 4; Mahāv. i. 7, 1; viii. 1, 16ff.; Ep. Ind. ii. p. 98. From the Epic, further, Mbh. v. 34, 49; xii. 88, 29-30; 59, 49; 140, 64; xv. 7, 8; iii. 249, 16; xii. 107, 10-32; ii. 5, 80; xii. 36, 19; xii. 321, 143; Nār. i. 40, 155; x. 1; Brihas. xvii. 5ff.

in Manu's law-book, completed about the time of the Christian era, we read: "A king should enforce his own law only after a careful examination of the laws of castes and districts, *gild-laws*, and family-laws," where the laws of the gilds are already reckoned as on a par with those of castes and families.

If the king was bound to respect the laws of the gilds, he was none the less expected to see that the members of the gild followed their own laws. These laws were in fact as authoritative as royal decrees. This is a point often touched upon in the early law-books, where (in the words of Yājñavalkya, whose code belongs to the beginning of our era) "the king must discipline and establish again on the path (of duty) all such as have erred from their own laws, whether families, castes, gilds, associations, or (people of certain) districts."

Till the time of Vishnu's law-book, third century A. D., no one of these gilds appears as preëminent, but in this work "metal-workers and smiths of silver and gold" are mentioned particularly, though this preëminence may be due to accident. But the circumstance is interesting, because exactly these gilds became the chief gilds of ordinary towns, and because they were very likely the first to band together in self-defence, all the gilds originating in this way, but the goldsmiths perhaps first of all, since the old law in regard to smiths was so extremely severe as to call for some union on their part.¹

All compacts made by gilds as corporate bodies come under the general law of compacts, and both the older and later law-books content themselves with saying on this point that "the king should see to it that gild-compacts are enforced;" while in regard to compacts made by the gild-members for their own observance, the older law enjoined that the king should banish the member who violated any agreement made by the association to which the offender belonged.

¹ The old law in regard to a goldsmith found guilty of defrauding was based on the principle that a goldsmith can most easily deceive, and that when he does so he is "the vilest of sinners." The king is therefore directed to see to it that a goldsmith found guilty of cheating shall be chopped up into very small pieces with sharp knives, whereas ordinary thieves or cheats are merely beheaded. By uniting together and ostracizing a guilty member, the gild could inflict a punishment which, if it was not so severe, probably had a still more deterrent effect.

The reason why the gilds came into prominence just when they did is doubtless because it was at that period that the Buddhists arose, who reached the acme of their power in the period from the third century B. C. to the fourth century A. D. In accordance with this fact stands, too, the special prominence of gild-life in the eastern part of India, the home of Buddhism. As the Buddhists placed the warrior-caste before the priest-caste and gave unrestricted freedom to the third estate, it is not wonderful that gild-life is characteristic of a Buddhistic environment. The same, however, is true in regard to the Jains, a rival heretical sect, which also arose in the sixth century B. C. Hence it is, that on the one hand, early Buddhistic literature, from 350 B. C. onwards, teems with references to the gilds and speaks of the Heads of Gilds as of the highest social position, while on the other hand the seat of gild-power to-day is still found among the Jains (the Buddhists having left India), and especially among the descendants of those who claim to have come originally from the eastern seat of Buddhistic and Jain culture. Even in the earliest Buddhistic sculptures we find reference to gilds and gild-masters. From the literature we see that the Heads of Gilds were great house-holders who were not only high state officials but on occasion became kings, at all times being represented as in the social set of kings and princes, friends and intimates of the various Rájas of Oudh and Benares. They bore, too, the same name conferred to-day on the Heads of Gilds, namely Sheth, meaning optimus, the Heads being in name as in fact a literal aristocracy. The Sheth in old times was often addressed simply as house-holder, but with the connotation of land-owner, landed-proprietor. From the law it appears that there were gilds of various sorts, but the only prominent one in Buddhist literature is that of the merchants, those members of the "third caste" so oppressed by Brahmanism, so liberated by Buddhism. The Sheth who is a House-holder (a higher title) is sometimes the king's treasurer, as if the word (literally "house-lord") meant ruler of the king's house, for he is the chief official of the kingdom. The Sheth's office, either as treasurer or **simple Sheth**, was, however, hereditary. Such, in Buddha's day,

were the great Sheth families of Benares and the neighboring towns. They represent a cross-cut through the ancient system of castes, a plutocracy perpetuating itself as an aristocracy. This view was adopted by the Brahmans themselves, who soon after this period began to make a sharp distinction between the very wealthy and the ordinary members of the third estate, who still remained a despicable caste "created for the king to devour;" till the new democratic tendency finds expression in the words of the epic sage, who says: "That which is called *the wealthy* is a very important member of the state; for verily a man with money is the top of all creation." The great epic is full of allusions to the gilds. Their power is reckoned as equal to that of the army; their Heads must be "talked over" by spies when the king would subdue another kingdom; they are "supported by union," and the king is especially charged not to tax them too heavily, lest they become disaffected, which is represented as a very great calamity. As the epic was probably completed soon after if not before our era, it is interesting to notice that perhaps the modern Pancháyat was already known at that date. For in one of the didactic portions mention is made of the "five, valliant and wise" who in each town "preserve order." They are expressly stated to be a united body "among the people," that is in the country. There is also one passage where the later Mahájans may be referred to in the epic. For many centuries this word (literally "big people") has designated the masters of the more important gilds as well as the gilds themselves. Nowadays it is usually applied in the eastern part of India to wealthy bankers and gold-merchants. The passage in the epic, however, does not certainly use the word in its modern sense, and it is several centuries before the word occurs again in its modern meaning.

In the law-books of Nárada and Brihaspati, assigned to the fifth and sixth centuries of our era, some new legal material in regard to gilds is found. We learn that the gild is governed by a board of from two to five persons. The villages are directed to "take the advice" of such a Pancháyat, which oversees the affairs of smaller associations as well as its own. Banishment is the punishment of anyone who injures the joint-

stock of a gild or disobeys its laws. Banishment and confiscation of his entire property is the penalty for a man's failure to perform an agreement entered into by all the gild. The power of the gilds at this epoch is shown by the fact that *the king must approve of whatever the gilds do to other people*, and that there may be no mistake is added *whether what they do is cruel or kind*. This is a plain advance on the earlier law in this regard. The question as to what is to be done if a dispute arises between the Sheths and their gilds is also opened here, and it is ruled that the king shall act as umpire between them. On the other hand, if the king learns that a whole gild, *actuated by hatred*, is boycotting one of its own members, he is directed to "restrain them." All funds donated (by the king) to a single member of a gild shall belong to all and be divided among the gild, or bestowed on needy persons. All royal gifts and all expenditures of the society are common to all.

The gilds at this time (the fifth or sixth century A. D.) tried their own law-suits, but a right of appeal to the king as final court is permitted. If, however, a case is appealed and is again lost, the appellant must pay double what he was fined by the first court. A very decided stand is taken by Nārada in regard to the old question whether scriptural law or local custom is authoritative. "Custom," he says, "decides everything and over-rules scriptural law."

It is Nārada who gives us the first rules in regard to apprentices. From these it appears that a young man desirous of learning a trade was free to do so (in other words "caste" was not so strict an index of occupation as it is supposed to have been). The young man left his father's house and lived with a master. This master taught him and fed him and made him work, but might not make him do any other than the trade-work which he was learning. The youth was "bound out," for there is a special law which permits the master to compel the apprentice's return should the latter run away. The apprentice might be whipped or shut up if he was disobedient. In fact he was to be "treated like a son." That he was bound out for a given length of time and that the advantage from his work was wholly his master's follows from another law, which specifies that in

case the apprentice has learned the trade more quickly than the contract called for, the time left over shall be his master's, and all the profit derived from the apprentice during that period shall accrue to his master. If agreed upon in advance, however, the apprentice might be rewarded with a fee when he became proficient, but he should continue to work for his master till the stated time was up. The pupil is expressly commanded to be humble before his master. The reason given is quaint enough to quote. "For science is like a river ever advancing downward to a humbler level; therefore as one's knowledge grows broader and deeper he should become ever more humble toward the source of his knowledge."

Very important evidence is given in regard to the gilds by the inscriptions on rocks and copper-plates, found over northern India. At one time we read of gilds presenting moneys as religious bodies, at another a man registers himself as "merchant Head of such a gild." In one inscription of the fifth century there is a very instructive account of a sun-temple built and endowed by a prosperous gild of weavers who had emigrated from their native district and after various hardships prospered sufficiently to build a temple. Here is brought out prominently the fact that a change of occupation is not unusual. Some of these weavers, it is recorded, took to other trades.

Another inscription shows that the gilds acted as banks. They receive as a body moneys in perpetuity, a trust-fund, the principal of which they keep, but for the use of this they pay, to the beneficiary named in the grants, 5% interest (a month). Here the *sabhá*, "gild hall," is spoken of.¹

A Nepalese legend of the third or fourth century records that Thana, which is minutely described, was ruled by a strong merchant gild.² Later literature down to our own time contains frequent references to such bodies, but no thorough treatment of them is to be found, though the allusions to the conspicuous position held by the gilds and their Heads fully attest the correctness of the law-books in laying so much stress upon their power.

¹ *Corpus Ins. Ind.*, vol. iii. No. 18; *Nāsik Ins. Arch. Surv.*, vol. iv. p. 102.

² Oppert in the *Madras Journal*, 1878, p. 194; *Bombay Gazetteer*, vol. xiii. p. 406.

The check on this power was held by the king in his prerogative of taxing at will whenever he could claim that "hard times" induced hard taxes. Ordinarily a small tax is put on every marketable article, the tax to be paid in kind or in money. But when occasion arose the king might tax as he pleased or even take what he pleased from all subjects save the priests. When land-grants became common it was customary to have stated in them just what tax each trader or inhabitant of the town deeded in the grant was to pay to the grantee. Most of these imposts were decided by the king (or officer) "in consultation with the Heads of gilds."¹

In the autumn of 1897, thanks to the courtesy of the distinguished Sheth of Ahmedabád, Mr. Lâlbhai Dalpatbhai, I was granted the privilege of an interview with the leading Sheths and Patels (head of artizan gilds) in that city, who very kindly consented to be questioned in regard to the rules and practices of their local gilds. The value of the information received lies partly in the fact that Ahmedabád is the center of gild-life in India; but particularly in this, that the gilds have no written laws and in many cases no clear plan of procedure in unusual circumstances; and that the power of the gilds is declining and their practices will soon be modified through the ever-increasing number of merchants and manufacturers who do not belong to any gild, and whose methods are more modern, so that their influence is destructive of old conditions. Some of the statements made at this conference by the gildmen agree with those embodied in various reports of gilds published in a more or less fragmentary manner in different numbers of the *Bombay Gazetteer*. Others are in direct contradiction to the report. In the former case I have given precedence to what has already been published; in the latter, I have generally presented the corrected statement first, for in instances of this sort I inquired particularly of different members, both in regard to their personal knowledge and what they knew by hearsay, and when all agreed as against a printed record made by some official, I judged that they knew best.

it in regard to historical data I was unable to learn anything

Compare the first Súrya grant in the Bhaunagar collection, pp. 67-69.

of value. In answer to what had happened in the past, the members of the conference always referred to two or three aged Sheths who "remembered" this or that. Sometimes they remembered in unison, sometimes they remembered variously. When this happened they accepted it as a proof that there was "no use in asking about things too far back." I came to the same conclusion and omit all cases of divergent recollections.

To the information obtained at Ahmedabád, I have here added what I could gather elsewhere in Gujarát and in Rájputana, collecting also what I could in other towns to the east and north. But I soon found that though the name remained and some gild-functions were to be found as far away as Lahore and Benares, yet it was always a lessening ripple as compared with the center of gild-interest in Gujarát, where indeed, after the earlier Buddhistic period, the gilds seem to have always had their firmest stronghold.

To those unacquainted with modern conditions it may be necessary to say that the modern merchants, Vánias, are in reality the most important caste socially; after them come the priests. There are no warriors, and the Rájputs regard themselves as a distinct caste. Small traders such as the Lohánas and Bhátias of Kathiawar usually claim Rájput descent, as do most artizans. But goldsmiths claim that they are pure Vánias. The merchants of the north, when not Parsees or Mahommedans, are usually either Shrávaks, that is Jains, or Vishnuite Vánias, or Smártas, that is Brahmans of the Shiva faith; more rarely they are Meshris, that is Brahmans of the Vishnu faith. Thus it will be seen that all the old castes have become more or less mercantile. It may be observed, further, that gild-men are usually Hindus, who claim Aryan descent. But in the North, Mahommedans occasionally form gilds, as they do in castes, in weak imitation of Hindu models.

THE GILD AND SHETH OR PATEL.

No perfect uniformity exists in regard to the names and titles of gilds and their chiefs. But there is a general distinction between artizan and merchant gilds. There is, again, a distinction between the village-gild and the gild of a large town.

In a village there is sometimes but one gild and the head of the gild is then the head of the village itself, the Patel. In many cases there is but one gild-occupation, all other villagers being "outsiders," who do not belong to the "village-gild" at all. These outsiders are people of the lowest class, public servants and the like. In some cases they are recognized as "intruders," that is as people who have come into the village and settled there but do not belong to it, "outsiders" with a touch of their profane birth still adhering to them. But all trades usually form one gild in a village, and the members form one corporate body against encroachments on the part of government or the entrance of new families with like trades into the village.

Distinct gilds are formed by the scission of separate gilds as the village grows into a town. But there always remains a loose trade-union between all the gilds even of a large city. The gilds thus separate are often identical with caste. This, however, is not the case in very large towns, where, owing to outside influence and other causes, trade (gilds) and caste are more apt to be diverse.

The complete gild-system of a city makes a clear distinction between the Panch or artizans' gild with the Patel as its head-man, and the Mahajan or gild of merchants, bankers, and large dealers, the leader of which is called a Sheth.

This title of Sheth is used in two ways, the one I have just described, and another, according to which Sheth is a title of honor given to the head-man of the city, hence called Nagar-Sheth or City-Chief. As a merely complimentary title this name Nagar-Sheth may be applied to wealthy traders, but properly it is bestowed upon a prominent civilian who may or may not be a merchant. Not very long ago, at the time Mr. Lely wrote for the *Bombay Gazetteer*, the Nagar-Sheth of Ahmedabad was still a very influential person, but he has already lost much of his power, which has been taken by a leading manufacturer, a man who does not belong to any gild, but who by public gifts and wealth has won in the business world a position of commanding influence, a fact indicative of the rapid passing away of the old order. The Nagar Sheth of

Ahmedabád is the head of a great Jain family, and his title has been inherited for several generations. He is practically the leader of the religious community of the Jains, and a few years ago he and the chief of the cloth-makers' gild, who happened to be the head of the Vishnu sect, could, in Mr. Lely's words, "carry public opinion on a religious or semi-religious question." In other towns this title has become a mere name, and even in Ahmedabád the Nagar Sheth has now only a religious and social importance. For instance, at a time of famine he must walk around the walls of the town, pouring out an oblation of milk to the god of rain. As Sheth of the bankers' gild he is, apart from his civil office, influential socially, but his preëminence as City Chief was due originally to the standing of his family rather than to the importance of his gild.¹ It would appear, therefore, that we have in the Nagar Sheth the survival of an office which corresponds very nearly to that of an old-fashioned mayor, though the incumbent of the office is neither appointed by the ruling power nor elected by the people, but chosen on account of his social superiority from among the gild-Sheths to represent the dignity and power of all the commercial classes of the city.

The usual Sheth, however, is the head of a gild of "big men," Mahájan, and a union of all trades in a small town is sometimes called a Mahájan, as in Broach, where the "city Mahájan" includes bankers, money-changers, agents, brokers, cotton-dealers, and so forth, being in fact a sort of board of trade, or chamber of commerce, though it is also a protective club against artizan-gilds. For wherever there are gilds of artizans it becomes necessary to have some sort of union against them. Otherwise on the slightest occasion of discontent a man of superior social rank would become obnoxious to great misfortune, since all the artizan gilds would boycott him. The only defence, therefore, is to be able to boycott the artizan and his gild. This is sometimes done, but generally, since a mutual boycott is a mutual disadvantage, the mere presence of the union on the part of the victims of the artizans

¹ Compare Lely, *Bombay Gazetteer*, vol. ii. p. 321.

leads to a more conciliatory tone, and unpleasantness is averted by mediation.

The word Pancháyat is applied in large towns to trades that are coterminous with castes. In Ahmedabád this would appear to be always the case. Mr. Lely's statement to the contrary in the *Gazetteer*, vol. iv, p. 106, was contradicted by all the members of the conference, who said that the word Pancháyat was used only when gild coincided with caste. But in other places, as in Surát, a Pancháyat may include different castes. The same is true of the Panch Mahál district, only here, where the population is small, the general trade-regulating merchants' gild is more apt to be dignified with the name Mahájan. As all the small gilds are called Panchs in Ahmedabád there would seem to have been evolved here a nicer terminology, by virtue of which the original application of Pancháyat was more carefully preserved. In respect of the wider use of Mahájan, which obtains in some parts of Kathiawar as a designation of artizan gilds (according to the statement made in his report by Mr. R. Proctor-Sims), the conference was unanimous in saying that only when all gilds were united could they be called, as a collective body, Mahájan; and that no single artizan gild was ever so dignified. Nor have I personally found anywhere in Kathiawar corroboration of Mr. Sims' remark that tailors, blacksmiths, potters, and other lowly people "have each a Mahájan."¹ The Patel of the blacksmith-gild at the conference said he did not believe that the title Mahájan was applied "to any single artizan-gild in the country," and I am inclined to think he was right. Another slight error in Mr. Lely's account is found in his statement that in Ahmedabád "there are four castes of carpenters and therefore four assemblies for caste purposes, but only one carpenters' Mahájan." The chief of the carpenters told me personally that he was Patel of a Panch, not of a Mahájan, and that the castes were not true castes, for they intermarry.

On the other hand, the same caste may have sub-divided gilds. This I found to be the case among the silversmiths.

¹ Compare the *Bombay Gazetteer*, vol. ii. p. 321; vol. iii. p. 251; and vol. viii. p. 265.

They all belonged to one caste but not to one gild. But it sometimes happens that one gild comprises different casts. Thus the chief of the confectioners stated that there were three castes in his gild. These were real castes, that is, the members of the gild were divided into groups which would not eat together nor intermarry. The chief explained this by saying, that the castes were geographical. This is probably so. In old days, one caste one occupation; but now strangers with different habits and of different origin unite in one occupation as they drift locally together.

There is an intermediate stage in large towns between the great merchants' Mahájan and the humbler artizans' Panch. This is represented by the "pure Vania caste" goldsmith. The smiths of gold (and silver) are the highest Panch or the lowest Mahájan, depending on whether the goldsmith is at the same time a banker. If there are several goldsmith-bankers, they are called a Mahájan. But the mere artizans belong to a Panch, as do all lower smiths, carpenters, masons, tile-makers, dyers, and so forth. Of these humbler organizations the most powerful is usually the tile-makers' gild, on the good will of which everyone is dependent, and which controls absolutely the still humbler but important gild of potters.

The number of gilds in a town differs greatly, most large towns having from thirty to one hundred and fifty. In the fifth century of our era one of the late law-makers says there were eighteen gilds, but they have evidently been increasing in number, as even to-day they show a marked tendency to multiply rather than decrease. The less important they are in any large city, the more there are of them. Thus the gilds of Jeypore have not nearly the power of those of Ahmedabád, which is a smaller city, but there are forty gilds in the latter place while there are thrice that number in Jeypore. This is due rather to the splitting up of the gilds themselves than to the formation of new corporations. Where the gilds are influential they remain undivided. But when they lose the significance they once had they tend to become mere clubs, which an irreconcilable quarrel will frequently cause to divide; so that the same profession will be represented by two opposed

factions. Even in Ahmedabád there are ten more gilds to-day than there were twenty years ago.

In the country, when an outsider is opposed to the gild the Pancháyat will deliberate on the case and invariably settle it in favor of the gild, unless the outsider be rich enough to corrupt the Pancháyat or strong enough practically to overawe them. In ordinary cases the Pancháyat of a village-gild practically forbid all competition.

The Panch may contain different castes, but the Mahájan may comprise different races. Ordinarily, however, two gilds to a trade is the limit of expansion, as in the case of the cloth-merchants of Ahmedabád, where workers in silk and in gold form two distinct gilds in the brocade trade.

APPRENTICESHIP.

The old law to which I have referred above seems to have fallen into desuetude. No articles are made out, no premium is paid, and in fact there is no real apprenticeship. Artizan boys learn their trade at home or receive small wages while they learn it under a master, but in no case are they bound out, being free to leave their own work if they (or their parents) think it best to do so. The old idea of an inherited trade is generally kept, but it is violated frequently and with apparent impunity. Sometimes the boy's keep is considered a sufficient return for his work till he has mastered his trade. What may appear at first sight to be apprenticeship is in reality a private arrangement between a father and a master-workman, who is asked to take charge of the boy's education, but does not take the boy with legal formalities. Twenty-five rupees a year after the first year of training is considered sufficient recompense for the value of the boy's labor, and thereafter three rupees (one dollar) a month, till the trade is learned. In Jeypore, I was informed that there used to be a fine inflicted on any man whose son learned a new trade; but no other means to prevent a change of family occupation was ever taken, and nowadays the old rule is not enforced.

THE HEADMAN AND ELDERS.

The Sheth, or Headman of a gild, holds his position by hereditary right, which may, however, be set aside. But the right is that conferred by custom and is therefore very strong. Only unusual circumstances would prevent a son's succession to his father's position as head of the gild. The dignity of the gild is represented by its Sheth, so that the usual rule is for the son to succeed provided he is fitted to uphold the moral and financial standing of the family and gild. Otherwise he is set aside. In this case the new Sheth is elected from a new family, not usually from the same family, as Mr. Lely asserts; who also remarks that the unworthy son "still retains the title," a statement denied by the conference. They said that a new family would in all probability be selected, but they admitted that the second son of an old Sheth might possibly get the office.

The election is made by the whole gild and is settled by a majority vote. The case where a new candidate has to be selected appears to be rare, for the members of the conference were unable to say what would happen if there were more than one candidate, or whether there would be more than one. They seemed to think that only one name would ever be submitted to the gild to vote upon, and I fancy that this is a fact, since the personal influence of the rich is very great, and they would rather settle the matter first among themselves and then submit the name to the whole gild *pro formâ*. No one in the conference had ever heard of two candidates being put forward. They said that "of course the best and biggest man" would be made Sheth. But indeed to have any real candidate is extraordinary. Ordinarily the eldest son of the deceased Sheth becomes Sheth with only the form of an election. The procedure, however, as imagined by members of the conference, would be as follows in case there was need of a new Sheth from a new family (I cite verbatim from notes made on the spot): "There would be but one candidate, for there can be but one best and biggest man. The most influential men, quietly coming together, on making in their minds the sad

discovery that the son of the Sheth was not fitted to inherit the dignity of his fathers, would agree upon that person who would best represent the gild, and having amicably agreed upon this man they would go before the gild and say, "Vote for this man." Question: "Suppose the gild refused to vote for him?" Answer: "The gild is sometimes opinionated in other matters, but we have never known a gild refuse to vote as its influential leaders directed it to do when the question was one of election." Question: "Do the venerable Sheths remember such a case?" Answer: "It is not remembered." In short, the gilds elect as the leaders select.

These "influential leaders" are the elders or Council of the gild, and they too bear the name of Sheth, but only as a decoration. There may, however, be two real Sheths, in which case each Sheth is originally the Sheth of his own caste (gild) or sect. Thus the local silk-cloth gild of Ahmedabád has two heads, one to represent the Shrávaks and one to represent the Vishnuites, and in nearly all the great city-gilds in Gujarát the two prevailing sects are thus represented. The sons of councillors inherit the title as a matter of courtesy and are often in reality the councillors of the next Sheth, so that the Sheth in council seem to represent an hereditary body. The proverb cited by Mr. Lely, *loc. cit.*, p. 108, "Energy makes the Sheth, no one asks what family he is," represents a theoretical possibility, and doubtless an historical fact, but not the present condition of affairs.

In small country towns in Gujarát every leading merchant is politely called Sheth, as in Benares he is called Mahájan, or as in New England a country lawyer is called 'Squire.

As a great part of the charity performed by the gild is of a religious character, when the Sheth is of a different sect to that of most members of the gild, and the latter have no sectarian Sheth of their own, the gild will often give over its charity-moneys to the Sheth of another gild of identical sect. Thus Shrávaks with a Vishnuite Sheth will entrust their moneys to the Shrávak Sheth of another gild, lest their own Vishnuite Sheth expend them for a temple rather than for the

Shrávak Pinjra Pol (asylum for decrepit animals). As for this seeming incongruity in so religious a community, it may be observed that the people are as conservative as they are religious, and though in a Shrávak environment it sometimes happens that a Vishnuite Sheth finds his gild slowly becoming Shrávak, yet he never thinks of relinquishing his position on this account, nor does the Shrávak majority think of ousting him.¹

AUTHORITY OF THE SHETH IN COUNCIL.

The gilds have been growing steadily more democratic, and in matters other than the election of a Sheth not infrequently stand out against the decision of the Sheth and Council. Half a dozen leading members of the trade make the council (though the number is not fixed), and these with the Sheth are recognized as gild-men apt to work for the interest of the whole body, so that there is no natural antagonism between gild and leaders. The Sheth and Council are, as it were, the president and cabinet of the gild. The interest of one is that of all, and in ordinary circumstances there is a ready acquiescence on the part of the whole gild in any measure brought forward by the Sheth and supported by the Council. But occasions do arise when the whole body stand in conflict with their officers. The venerable men who "remembered" for me assured me that in the good old days a gild never objected to any measure proposed by the Sheth and Council. But in these days many wish to adopt "perilous modern methods," others think that they ought to be consulted, and still others "take every opportunity to object to authority." Only twenty years ago, as may be seen in Mr. Lely's report already referred to, it was possible to state truly that the Sheth and Council have virtually the whole authority. The rather unwilling admission of my informants (it must be remembered that they were all Sheths and Patels) tends to show that this is no longer the case.

¹ The city Mahájans are usually made up of Lohánas and Bhátias, as well as Vanias, though, properly speaking, the last should include the first two. But Vanias in common parlance are bankers and cloth-merchants of the Shrávaks, that is laymen of the Jain faith, or trading Bráhmans, such as Meshris, who are found in some localities; while Lohánas are Vishnuite grain-dealers (the poorer sort being husbandmen), as are the Bhátias.

I was in fact rather mournfully assured by various members of the conference that "a majority of ordinary members of the gild always can, and often do, carry a measure over the heads of Sheths and Council." In less gild-ridden towns and cities I was told that Sheths were now without much power, and even the Sheth and Council combined had only an advisory function. But it was everywhere recognized that this was a changed condition, and that formerly the advice of the Sheth was practically law to the gild.

OFFICIALS AND MEETINGS.

The only officer besides the Sheth is the Gumásta or clerk, who in the case of the great Mahájans calls the meetings and acts as secretary. The title really means an agent, and the Gumásta acts in this capacity in so far as he is authorized to drum up recreant members and urge them to attend the meetings. The Gumásta, if one exists (for there is often no such officer), receives a salary; but no Sheth or councillor receives a salary or accepts any money in his official capacity, unless it be the Sheth of a Mahájan in a small country town, who may receive a fixed sum for collecting fees imposed by Government on his own and other local gilds.

The duties of the clerk consist also in collecting moneys and keeping accounts, but he must discover and report transgressions on the part of members and "execute any order that may be given on the part of the corporation." To this description of the clerk's functions (furnished by Mr. Lely, *loc. cit.*, p. 107) I am unable to add anything of importance.

The meetings of the gild are held in the local Vádi or gild-hall; the clerk calls the meeting at the request of the Sheth or of any other influential member of the gild or on the demand of ordinary members. There does not seem to be any regular practice in this respect. The conference said simply that when a meeting was wanted by any important person or demanded by several members there was a meeting. Meetings are not held at stated intervals, but as occasion presents itself. If there is no clerk, the Sheth calls the meeting (when requested to do so), sending a written or verbal message to the different

members. If there is no gild-hall, any convenient room, as in the house or shop of one of the members, is selected for the meeting. So far as I could learn, there is an utter absence of formality at these meetings and no parliamentary rules are followed.

MEMBERS AND FEES.

As occupation usually goes by caste, any member of a caste engaged in a certain occupation is, *ipso facto*, a member of the gild. In small towns there is often no entrance fee in artizan gilds, but the Mahájan exact one from new members. All sons, however, of a deceased member, without paying an entrance fee, become members of the gild on his decease, and are received into the gild without formality. Membership is a family right which once acquired is inherited. But from other new members an entrance fee is demanded, which varies from one hundred to three hundred and fifty rupees. A fair average of the fees of the more important gilds is three hundred R., or about one hundred dollars. But the borders-gild of Ahmedabád has a fee of only two hundred R. Three hundred are demanded by the cloth-gild; several gilds demand three hundred and fifty; and even five hundred was quoted as a possible fee, but no gild represented at the conference admitted that its fee was so high as this. Some of the artizan-gilds ask a fee of one rupee as matter of form, but their fee is generally a dinner-party. The fee, though usually the same for all, may be partly remitted in the case of a desirable member who is too poor to pay the large sum demanded by some gilds.

A discredited member may not return to the gild when once cast out (by vote of the gild). If his offence is a caste-offence his children are debarred from admission. The practice varies in different localities. In Jeypore, for example, a member is not dismissed, but he is allowed to drop out of the gild. Here too the sons may enter though the father has been informally ostracized. When the father has dropped out on account of poverty, the son that has prospered and desires to enter the gild may do so, not usually at once, but after some

years. There is no rule on the subject. It is largely a social question. If a member changes his business he of course leaves the gild, but he may be reinstated if he resumes it. A change of trade or business is not unusual, nor was it so in ancient times, though our notions of caste based on the law-books lead us to think so. As to a new entrance fee from reinstated members, in Ahmedabád the general opinion was that it was not customary to demand it. But in case a discredited or dropped member dies, while it is permitted to his son, it is not permitted to his grandsons to enter without a fee. If a member fails he is not dropped on this account. The gild investigate his business and if it is found that he has failed dishonorably he is dropped; if honorably, "the creditors in the gild accept a part of the debt and help him to tide over his difficulties when he repays all. But the funds of the gild are never used for this purpose." In this particular there is a difference between the gilds of ancient times (when it is expressly stated that they help their needy members) and of to-day, when all the funds are devoted to religious charity. No Sheth of the conference would admit that any gild-money was ever spent on a member of the gild, however much he might need it. Nor does the gild care for the needy families of deceased members.

The dinner-party fee of artizan gilds is not always the rule. In Broach, for instance, the bricklayers demand a small fee of each new member. But generally the family (or it may be the caste Pancháyat) raises money enough to give a dinner to the rest of the gild. The rite constitutes the entrance fee and is the only formality observed. This applies only to those who have learned a new trade different from their father's, and are hence obliged to enter a new gild.

In many cases there is no fee at all. Thus in Bhaunagar and in Jeypore, one in Gujarát and one in Rájputana, there is no fee. It is customary only where the gilds are most stringent in their rule and most conservative. There is no annual subscription (as Mr. Lely says there is), and consequently there are no arrears to be paid.

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BANK CLEARINGS, INTEREST RATES AND POLITICS.

THE volume of the Clearing-House Exchanges is often cited as an evidence of prosperity or depression, and with very good reason. The total amount of checks or "clearings" forms a sort of trade barometer, rising in fair weather and falling when the financial skies are overcast; and this instrument is more sensitive to changing conditions than is often recognized.

During the last six years business affairs have been several times greatly disturbed by political action. The silver party and the war party have frequently upset stable trade conditions, a panic has been precipitated by a monetary system based on the exigencies of politics instead of upon the laws of commerce, and a presidential election has been held which involved the very existence of civilization.

The bank clearings have reflected all these political errors and agitations. Production has been restricted and the demand for goods has been lessened by the baneful influence of political demagogues. The disposition to trade and the willingness to trust, in other words *credit*, has been frightened away by fears of a depreciated currency; and this diminished production and the partial obliteration of credit has caused a shrinkage in the volume of bank clearings.

An examination of some actual clearing-house transactions may be of interest.

It has been urged that the conditions of banking in New York are such that its clearings do not form an index of the general business of the entire country, and that the metropolitan clearings fluctuate in changing financial weather to a greater degree than do those of other clearing-houses. Therefore, eight other cities have been selected from various parts of the country and their combined clearings are used in making up the following table of clearings for each quarter-year from 1892 to 1897 inclusive.

The cities considered are Boston, Chicago, St. Louis, Baltimore, Louisville, Cincinnati, Minneapolis and New Orleans.

Year.	Clearings in millions of Dollars. 1st quarter.	Clearings in millions of Dollars. 2d quarter.	Clearings in millions of Dollars. 3d quarter.	Clearings in millions of Dollars. 4th quarter.	Clearings in millions of Dollars. Entire year.
1892	3387	3459	3422	3959	14229
1893	3641	3480	2629	3147	12897
1894	2905	2936	2823	3295	11960
1895	3007	3307	3184	3638	13137
1896	3091	3214	2851	3373	12531
1897	3032	3232	3412	3935	13612
Average for six years.	3177	3271	3053	3558	13061

In 1892 the clearings represent a very prosperous year with the prosperous era extending well into 1893. Indeed the totals for the first two quarters of that year exceed by 275 millions the totals for the first half of 1892. At this point, however, the evils of an unwise currency system culminated in the panic of 1893, which reached its height at about the middle of the third quarter of the year, and was evidenced by the shrinkage of the clearings from 3,480 millions in the preceding quarter to 2,629 millions,—whereas usually the totals for the second and third quarters are about the same. Compared with the corresponding quarter of 1892, the third quarter of the money-panic year showed a shrinkage of 793 millions, or 23 per cent. It also was 424 millions below the average for the same period during the six years 1892-7.

With the repeal of the silver-purchase act on October 30th, 1893, business conditions improved and the clearings for October, November and December recorded a gain over the preceding quarter of more than 500 millions. Throughout the next year, 1894, the maintenance of the gold standard seemed at times in doubt and heroic measures were taken to sustain the government's gold reserve. Recovery from the panic proceeded slowly, accompanied by very low prices for commodities,—hence the clearings were unusually light. Indeed the total for the year was but 11,960 millions, considerably less than any other year from 1892 to 1897.

By the following year all doubt as to the ability or the intention of the administration to maintain the gold standard had vanished.

Through bond issues the needed gold had been obtained, business was reviving and the clearings for the year (1895)

plainly indicated it. The improvement was marked, and the first half of 1896 showed clearing-house transactions about equal in volume to the first half of the previous year. However, political matters once more became a disturbing element, when in July, 1896, the Democratic party adopted its free-silver platform. Business operations were at once curtailed, and a political panic overspread the country, the clearings for July, August and September falling to 2,851 millions as against 3,184 millions during the summer of 1895. With the defeat of this menace of politics in November, 1896, men took new courage and business increased, as evidenced by the very satisfactory volume of clearings during 1897.

It is to be noticed that the fourth quarter is almost invariably the largest quarter of the year, due to the large amount of settlements involved in harvesting and moving the crops. In 1893, this quarter was less than the first or second quarter, both because of unusually low prices for produce and also because of the continued stagnation of business due to the panic. In all the other years the last quarter was the largest of the year.

The following table shows the clearings for New York City, and it will be observed that their course corresponds very fairly with that of the eight cities already considered:

Year.	Clearings in millions of Dollars. 1st quarter.	Clearings in millions of Dollars. 2d quarter.	Clearings in millions of Dollars. 3d quarter.	Clearings in millions of Dollars. 4th quarter.	Clearings in millions of Dollars. Entire year.
1892	¹ 10046	8862	7891	9861	36662
1893	9879	8487	6192	6701	31261
1894	5938	6010	5580	6859	24387
1895	6499	7688	7217	8436	29841
1896	7251	7147	6514	7956	28870
1897	7021	7126	9223	10055	33427

Another way in which political action affects business affairs is seen in its influence upon the rate of interest which borrowers must pay upon loans. For the purpose of illustrating this effect upon discount rates, a record has been made of the rates at which prime bills receivable have actually been discounted

¹ The amount of clearings reported at New York after April, 1892, was lessened by the establishment of the Stock Exchange Clearing-House, which reduced the volume of checks required in payment of stock sales.

during each month of the last six years. These notes were given for actual merchandise and were all endorsed by the same concern, a large wholesale house in New York, whose credit has been of the highest throughout the six years and for many years before.

These notes are described in the following table as "Endorsed Bills Receivable."

The second class of notes considered, consists of the obligations of parties engaged in the handling and distribution of wheat. They are only such as are rated as worth one million dollars or upwards, and their notes are secured by warehouse receipts for wheat. In the table these notes are classed as "wheat paper."

Date.	Discount Rate for Endorsed Bills Receivable.	Discount Rate for Wheat Paper.	Gold Reserve in U. S. Treasury.
1892.			
October, -----	5%	6%	\$119 Millions.
November, ----	5	6	124 "
Dec. 1, -----	4¾	6	124 "
15, -----	5	6	---
1893.			
January, -----	5	6	121 "
Feb. 1, -----	4	5	108 "
17, -----	4½	5½	---
24, -----	5	6	---
March 1, -----	5	6½	103 "
9, -----	5½	6½	---
14, -----	6	6½	---
April 1, -----	5	6½	106 "
May 1, -----	5½	6½	96 "
13, -----	5½	7	---
June 1, -----	5½	7	94 "
15, -----	6	7	---
July 1, -----	7¼	7½	96 "
18, -----	7¾	8	---
Aug. 1, -----	8	---	99 "
14, -----	10	---	---
Sept. 1, -----	10	Practically no market at any rate.	96 "
7, -----	8	---	---
12, -----	7½	---	---
23, -----	6	8	---
Oct. 1, -----	6	8	94 "
18, -----	5½	7	---
Nov. 1, -----	4½	6	84 "

Panic of '93 due to the operation of the silver-purchase ACT and an unwise currency system. The panic reached its height about Sept. 1.

1898] *Bank Clearings, Interest Rates and Politics.* 47

Date.	Discount Rate for Endorsed Bills Receivable.	Discount Rate for Wheat Paper.	Gold Reserve in U. S. Treasury.	
1893.				
Nov. 11,.....	4%	5%	---	
Dec. 1,.....	3½	5	\$ 82 Millions.	
1894.				
Jan. 1,.....	3½	5	80	"
Feb. 1,.....	3	---	65	" \$50 millions Bond issue.
March 1,.....	3	Practically no paper in the market and no demand for money.	107	"
April 1,.....	2¾		106	"
May 1,.....	2½		100	"
June 1,.....	2½	---	79	"
July 1,.....	2¾	---	64	"
Aug. 1,.....	2¾	4	55	"
Sept. 1,.....	3½	4½	54	"
Oct. 1,.....	3	---	59	"
Nov. 1,.....	3	4	61	" \$50 millions Bond issue.
Dec. 1,.....	3	4	106	"
1895.				
Jan. 1,.....	3	4	85	"
Feb. 1,.....	3	4	45	" Feb. 8, 1895, Bond issue of \$62,315,400.
March 1,.....	3¾	4½	---	"
April 1,.....	3¾	5	87	"
May 1,.....	4	5	---	"
June 1,.....	4½	5	91	"
July 1,.....	3½	5	---	"
Aug. 1,.....	3	Very little Wheat Paper offered.	91	"
Sept. 1,.....	2½		99	"
Oct. 1,.....	3		107	"
Nov. 1,.....	3¾	---	107	"
Dec. 1,.....	3½	5	100	"
Jan. 11,.....	4	5	---	"
Feb. 23,.....	4½	5	---	"
March 1,.....	4½	5½	93	"
April 1,.....	3¾	5½	93	"
May 2,.....	4	5½	79	"
June 20,.....	4½	5	---	"
July 30,.....	6	6	---	" Venezuela Message."
1896.				
Jan. 1,.....	6	6½	63	"
Feb. 1,.....	6	7	50	"
March 1,.....	5½	6½	123	" \$100 millions Bond issue.
April 1,.....	5½	6½	129	"
May 1,.....	4¾	5½	125	"
June 1,.....	4	5	108	"
July 1,.....	4½	5	102	"
Aug. 20,.....	5½	5½	---	" July, '96, Democratic Na- tional Convention, fol- lowed by deepening de- pression till about Sept. 15, when the probable suc- cess of the sound money ticket began to be recog- nized and the best paper was in slight demand at
Sept. 24,.....	6	6	---	
Oct. 1,.....	7	7	111	"
Nov. 22,.....	8	7½	---	

Date.	Discount Rate for Endorsed Bills Receivable.	Discount Rate for Wheat Paper.	Gold Reserve in U. S. Treasury.	
1896.				
Sept. 1,-----	9%	8%	\$101 Millions.	8 per cent., gradually working down to 7 per cent. a few days before the election of Nov. 3d.
18,-----	8	8	---	
Oct. 1,-----	7	7½	124 "	
24,-----	7	8	---	
Nov. 9,-----	5½	6½	117 "	{ Nov. 3, 1896, Election day: money rate drops the next week to 5½ per cent., and "wheat paper" from 8 per cent. before the election to 6½ per cent. after. Gold reserve strengthens.
Dec. 1,-----	4	5	131 "	
1897.				
Jan. 1,-----	3½	5	137 "	{ Very large bank deposits and low money rates. Western banks loaning money in New York after taking all "wheat paper" offered.
Feb. 1,-----	3½	---	145 "	
March 1,-----	3½	4	148 "	
April 1,-----	3½	---	152 "	
May 1,-----	3½	No	153 "	
June 1,-----	3½	Wheat Paper offered.	144 "	
July 1,-----	3½	---	140 "	
Aug. 1,-----	3½	---	140 "	
Sept. 1,-----	4	4½	144 "	
Oct. 1,-----	4½	5	147 "	
Nov. 1,-----	3½	4	153 "	{ Feb. 15, "Maine" disaster. Rates begin to stiffen. Large gold imports increase the government reserve.
Dec. 1,-----	3½	4	157 "	
1898.				
Jan. 1,-----	3½	4	160 "	
Feb. 1,-----	3½	4	164 "	
10,-----	3	3½	---	
26,-----	3½	4	---	
March 1,-----	4	4	167 "	
April 1,-----	5	5½	174 "	

From the foregoing table it will be seen that the interest rate has closely followed political action as it in turn threatened or favored business stability.

During the '93 panic the rates rose as high as 10 per cent., falling, however, in November after the repeal of the silver-purchase act to the more normal level of 4½ to 6 per cent.

Again in December, 1895, the rate for "Bills Receivable" rose one and one-half per cent. as the result of the "Venezuela Message." Later the Democratic platform of 1896, disturbing all legitimate business, was a most potent element in compelling borrowers to pay large interest rates during the summer of that year; while the result of the election promptly reduced the current rates. In September, the political situation dictated an 8 per cent. rate; in December, money was abundant at 4 per cent.

The malign influence of politics is thus shown; first by a lessened volume of clearings, which means fewer business transactions; and secondly, by an increased interest rate, which means greater expense in the conduct of business. It reduces the opportunities of business and increases the cost.

Business settlements are effected by the use of money and credit, and as it is well known, the great majority of transactions are settled by the use of credit instruments and not money. A slight contraction of the money currency may have no appreciable effect upon trade, while unwise political action often destroys the effectual use of thousands of millions of credit instruments, and entails widespread loss upon all business interests.

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TWO PLANS FOR CURRENCY REFORM.

IF the progress of currency reform seems slow and laborious, the forward movement halting and the goal remote, we may do well to pause a little for breath, to take a calm survey of the distance already accomplished and the height gained, as an aid and stimulus to further endeavor and ultimate success. And the two plans for currency reform, embodied the one in the bill of the Secretary of the Treasury presented in the House of Representatives, December 16th, 1897, the other in the report of the Monetary Commission bearing date December 17th, 1897, furnish a convenient ground for such a halt. Both of these proposed measures come with an authority and embody a maturity of knowledge and reasoning which no plans previously advanced could claim. The bill prepared by Mr. Carlisle, when Secretary of the Treasury, and discussed in the House Committee on Banking and Currency in 1894-5, was the work of one untrained in banking and finance, however great his judicial and economic wisdom and learning; it represented the opinion of but one section—and that the smaller one—of a divided party; its only mission was to awaken interest and furnish a concrete object for discussion, largely antagonistic. The bill of the present Secretary of the Treasury is, on the contrary, the work of an experienced banker and financier, holding high office in an administration brought into power solely on the currency issue; the dominant party shows, as it always has shown, far greater coherence and subordination, and its chief, the President, commands the loyal respect and confidence of all its members.

In like manner we may compare with the report of the Monetary Commission the so-called "Baltimore plan" for currency reform, put out in the fall of the year 1894. This latter was essentially a bankers' plan, elaborated by men who had felt the full pressure of the calamitous months in 1893, and were resolved to do their utmost to remove what they judged to be some obvious causes of financial disturbance. But the

knowledge of these causes among the public was not widespread, and the right of the authors to speak with authority was not widely granted; they too had to content themselves with doing pioneer work, opening up a path to be enlarged and laid on solid foundations by others after them. The Monetary Commission's report, on the other hand, is the work of a vastly more representative body, armed with authority far more deeply rooted and wide-reaching; it appeals to a broader constituency and commands from the outset a larger measure of approval.

But the progress in the three years from 1894 to 1897 is not to be measured solely by the change in political conditions which has given us a united executive and party in place of a President and House at sword's points, nor by the development of a class measure into a national one. The postulates of the two latest plans, the axioms on which both Secretary Gage and the Monetary Commission have based their proposed remedial legislation, are highly significant as marking great and necessary advance along the line of sound financial understanding. Secretary Gage, in explaining his bill to the Committee on Banking and Currency, begins thus: "The objects I have in mind in the series of provisions offered by me are: first, to commit the country more thoroughly to the gold standard, remove so far as possible doubts and fears on that point and thus strengthen the credit of the United States both at home and abroad." Compare with this the statement of the Monetary Commission, as follows: "We submit . . . a plan for currency reform, in the hope that it will, if enacted into law, accomplish, so far as possible, these results; first, to remove, at once and forever, all doubt as to what the standard of value in the United States is, and is to be; second, to establish the credit of the United States at the highest point among the nations of the world." That the standard meant is the gold standard is set forth later clearly and in terms.

No one can read these opening sentences without perceiving the advance which has been made. The word "gold" has been robbed of many of its terrors since the St. Louis platform and the campaign which followed it; just as it was one thing to

be an Abolitionist in 1835, quite another to be one in 1860. The believers in the gold standard no longer have to limit their confessions of faith to the closet and family hearth, or at best the ear of a friend at the club; an encouraging evidence of growth in common-sense and righteousness. For a long time we hardly dared look the facts in the face, much less breathe them aloud; a "dollar as good as any other dollar" was, financially, our *summum bonum*. Now, the Secretary of the Treasury on the one hand, and on the other a committee of men of weight and distinction, representing every section of the country, join in declaring that we have and must maintain the gold standard, and thereby establish and strengthen the national credit at home and abroad.

Any analysis of a scheme for reform, involving many and serious changes, may well start with the endeavor to determine from what side the author approached his plan, to learn if he holds a brief for any opinion or system which may throw light on his whole course of reasoning or procedure. Without making distinct avowal thereof, Secretary Gage leaves no room for doubt as to the shape in which the problem presented itself to his mind. To "strengthen the credit of the United States both at home and abroad," and to "strengthen the Treasury in relation to its demand liabilities;" these are confessedly his aims in proposing the changes embodied in his bill. That the nation's credit and its public purse should be the chief objects of the solicitude of our public officers, is what we may expect and demand; but the fact has in this case had too scant recognition.

The Monetary Commission, on the other hand, hold, and profess to hold, a definite brief from the Indianapolis Monetary Convention, which is clearly stated at the opening of their report. They there set forth certain principles which they have accepted, both as embodying the instructions under which they were appointed and because approved by their own judgment, which may be thus summarized; the maintenance of the gold standard, the gradual retirement of all United States notes and the establishment of a banking system which shall furnish a safe, elastic and adequate circulation. As compared with the

avowed aims of Secretary Gage, their scheme is obviously much the wider one.

One point, however, may be fairly considered in explanation of the differences just noted. The Secretary of the Treasury, surrounded as he is by the members of both Houses of Congress and in close touch with their leaders, has kept more constantly before him the desirability of producing a measure which might hope for speedy passage. All plans for currency reform have perforce their political side; requiring legislative enactment to become effective, they must be constructed with some regard to the possibility of such enactment. And to this side of the question the Secretary has evidently given more attention than the Monetary Commission. It may be that he is mistaken and that the one bill could be passed as easily as the other; but the fact is easily established, apart from all *a priori* inferences, by the Secretary's unwillingness to propose cancellation of any of the United States notes, and by the provisions in the Monetary Commission's bill calling for the payment by the Treasury of gold coin for silver dollars and giving the Secretary of the Treasury authority to sell silver bullion for gold. Each one of these questions must, sooner or later, come up for answer; but Secretary Gage evidently believes either that the answer may be deferred or that under the new conditions established by his bill the answer will find itself.

Let us look now at the plans themselves in detail, to determine what they aim to accomplish and how far these results, if accomplished, may be expected to prove beneficial.

Both plans propose the immediate establishment of a separate division in the Treasury department, to be known as the division of issue and redemption (Gage bill, Sec. 1; Monetary Commission's report, Secs. 7, 8, 9); and for the transfer to such division of certain moneys, coin and bullion now held in the general funds of the Treasury department. But the make-up of these two funds, and the purposes for which they are to be used, are not identical. Under the Gage bill there are to be transferred to this new division "one hundred and twenty-five millions of dollars in U. S. gold coin and bullion, and such

further sums of standard silver dollars and silver bullion purchased under the act of Congress approved July 14, 1890, as shall equal the silver certificates and treasury notes of 1890 outstanding on the date when this act shall take effect."

The last clause is not, at first sight, clear; by the words "as much silver bullion . . . as shall equal the treasury notes of 1890" are we to understand as much bullion as will make, when coined, a number of dollars equal to the total amount of treasury notes; or all the uncoined bullion to purchase which the treasury notes were issued? Obviously, it cannot mean silver bullion equal in market value to the amount of the treasury notes, for the bullion is notoriously worth much less. In his evidence before the House Committee, however, the Secretary seems to propose turning over all the uncoined bullion purchased with treasury notes.

Under the plan proposed by the Monetary Commission the division of issue and redemption is to receive and hold (Sec. 8) "all gold coin held against outstanding gold certificates, all U. S. notes held against outstanding currency certificates (certificates of deposit for legal tenders), all silver dollars held against outstanding silver certificates, and all silver dollars and silver bullion held against outstanding treasury notes of 1890—and the funds deposited with the Treasury for the liquidation of national bank notes." There is further provision (Sec. 9) for the transfer to it, as a reserve, from the general fund of the Treasury "of an amount of gold, in coin, and bullion, equal to 25 per cent. of the aggregate amount of both the U. S. notes and treasury notes of 1890 outstanding, and a further sum in gold equal to 5 per cent. of the aggregate amount of the coinage of silver dollars." We could wish a definition of the word "outstanding," whether it is meant to include notes issued but held in the treasury; assuming, however, the larger amount, the deposit of gold under this last provision would be about 136 millions, viz.: 25 per cent. of 456 millions (346 millions U. S. notes and 110 millions treasury notes) and 5 per cent. of 452 millions; a total but little larger than that called for by the Gage bill.

But the differences are worth examining carefully. There are

three funds which the plan of the Monetary Commission turns over to the new division, while the Gage bill leaves them in the general funds of the Treasury, viz.: the gold coin held against gold certificates, the U. S. notes held against certificates of deposit for legal tenders and the funds deposited for the liquidation of national bank notes. And the Commission's plan is, in this respect, unquestionably the better one. As to the gold certificates and the certificates of deposit for legal tenders, the Treasury is essentially a warehouseman; for gold certificates it gives back gold on demand, for currency certificates the identical legal tenders deposited. Such deposits should not appear in the Treasury's general assets, even though offset by corresponding liabilities. With the fund deposited by the national banks for the liquidation of their notes the case is even stronger. The fund is a trust fund, to retire circulation for which the banks have not ceased legally to be responsible, although they have paid into the Treasury dollar for dollar to cover it; and it is most dangerous bookkeeping which classes this fund among the general assets of the Treasury.

Under the plan of the Monetary Commission (Sec. 15), both the gold certificates and currency certificates are to be retired and not reissued. As to the former, their recommendation is wise in any event. The Treasury at present simply stores gold for the benefit of others, without consideration. With the currency certificates the question is somewhat different. The Treasury, in effect, converts its own small notes into large ones, at a time when small notes are burdensome, and reconverts the large notes when small ones are needed. As consideration the Treasury thereby keeps out its notes instead of having to redeem them, a fair *quid pro quo*; but if there are no U. S. notes issued of less than \$10, as proposed in the same plan, the need will disappear and the recommendation prove wise as doing away with one form of paper money.

It may further be noted that the plan of the Monetary Commission provides that all the operations of redeeming national bank notes shall be conducted by this division, under a separate system of accounts. It is possible that the same practice would result under Secretary Gage's bill; but it is not specifically provided for, and in so far the bill seems defective.

In prescribing the duties of the new division of issue and redemption in the matter of the redemption of the various forms of currency, the plan of the Monetary Commission is clearly in advance of the Gage bill in the definiteness and precision with which it lays down the functions of the division; the difference between the two in this respect is probably much greater than would be the difference of results in actual operation. Secretary Gage contents himself with providing that "all U. S. notes, treasury notes of 1890, and silver certificates . . . shall be redeemed . . . in accordance with the terms of existing law." Now the Secretary of the Treasury knows better perhaps than anyone that "the terms of existing law" are not so clear and universally accepted as might be desired. That the holder of U. S. notes may, under existing law, demand their redemption in gold, is very generally accepted; that the holder of treasury notes of 1890 may demand redemption in gold, it being expressly stated on the contract that they are payable "in coin," is a claim which finds considerable opposition; that the holder of silver certificates may demand gold therefor, is a proposition which very many would deny, unless such payment could be clearly shown to be called for under the clause of the act of July 14, 1890, declaring it to be "the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio." Evidently, then, the present state of the law, despite consistent and sound practice on the part of our administrations, leaves much to be desired; the most vital point in our whole present financial system is at the mercy of an administration or even of a single member thereof. The sobering effect of such responsibility has been amply proven in the past; but few would hold that past practice alone is an adequate guarantee for the future.

To this Secretary Gage might reply that should his bill become law the present uncertainty would in effect disappear; it would be a stage in our journey lying behind us, just as one must cross the equator in going from New York to the Cape of Good Hope, whether one wish to or not. And most probably he would be right; but the difference between the two plans is to be noted none the less.

In their provision for the treatment of the notes when redeemed, the two plans differ *in toto*. The Gage bill provides (Sec. 2) that the notes and certificates, when redeemed from the redemption fund, "shall be held in and constitute a part of said fund, and shall not be withdrawn from said fund nor disbursed except in exchange for an equivalent amount of the coin in which said notes or certificates were redeemed." The plan of the Monetary Commission provides (Sec. 14) that "U. S. notes or treasury notes once redeemed shall not be paid out again except for gold coin;" but with two important further provisions, first, in Section 18, that the division of issue and redemption "shall, on demand, pay in gold coin all U. S. notes and treasury notes presented for payment, and as paid cancel the same up to the amount of \$50,000,000"; with further provision looking to the ultimate redemption and cancellation of the whole amount within not less than ten years; second, in Section 14, that under certain conditions the Secretary of the Treasury is authorized to invest any accumulation of notes in the division of issue and redemption which cannot lawfully be cancelled, in bonds of the United States for this benefit of the redemption fund. It is fair to add that from this last provision one member of the Commission dissents; with good reason, in the writer's judgment. To grant such authority would mean to bring the Secretary of the Treasury into the money market as an important factor at critical stages, to call in government aid to alleviate conditions due usually to over-speculation. If such authority were never to be used it is idle to grant it, and to use it would be unsound and dangerous.

Between these two propositions, also, the apparent difference is doubtless greater than would be found in practice; either one marks great advance over existing conditions. The Gage bill says nothing about cancelling the government notes; they are to be kept as it were in cold storage and paid out on deposit of coin alone. The danger from the existing government notes is no greater, so long as they are safely locked up, than if they were burnt or macerated. But the notes will still exist, continuing the greenback tradition and lending a show of reason to the still living belief that the more government promises to

pay we have the better off we are; and the notes, as an apparent fund of money, are within reach of legislation. Here is obvious and decided danger, to be avoided at the outset, if possible; and this the Monetary Commission sets out to do.

The plan of the Monetary Commission provides (Sec. 10) for the maintenance of this gold reserve in two ways, by the transfer of surplus revenue from the general funds of the treasury and by the sale of gold bonds, bearing interest not exceeding 3 per cent., payable in twenty years but redeemable after one year. There is no similar provision in the Gage bill; but there is authority under existing law to sell bonds for gold for resumption purposes, and it is not conceivable that such gold will be needed under the terms of the bill, as will appear later.

Thus far, we have considered features of the two plans which are in large measure similar; for the rest the differences are greater and more marked. In the means proposed for withdrawing certain classes of circulating notes, we find substantial agreement; not so in the substitutes provided or in the method of providing them.

We may note first that the Gage bill proposes (Section 3) a refunding scheme, to be applied to a certain portion of the bonded debt of the United States, of which no trace appears in the plan of the Monetary Commission. It lies properly outside the scope of the latter's inquiry; but it has an intimate connection with the Secretary's plan for note issues and must therefore be considered. Briefly, it authorizes the Secretary of the Treasury to issue two and a half per cent. bonds, redeemable at the pleasure of the United States after ten years, payable principal and interest in gold coin; and to give such bonds in exchange for outstanding bonds maturing in 1904 and in 1907, amounting in all to about 659 millions, *provided* that in the exchange the old bonds shall be valued not higher than on a two and a half per cent. basis and that the new bonds shall be valued at not less than par. It may be questioned in passing if the Secretary would not have done well to insist upon an exchange value for the old bonds not higher than a three per cent. basis; for the gold clause the holders might well be willing

to surrender one-half of one per cent. As a refunding measure this plan has much to commend it. The annual saving in the interest charge would be offset by an addition to the principal, to be met when the debt is paid; but at one stroke we should have placed about four-fifths of our bonded debt where we need never be called upon to pay more than two and one-half per cent. interest. As the old loans must run at four and five per cent. respectively, if not paid or refunded at maturity, and as the proposed new loan may be refunded after ten years if desired, the proposition as a financial one is sound and desirable.

But Secretary Gage's plan for the issue of bonds is not simply and solely a refunding scheme, looking to the substitution of low rate for high rate bonds and the use of the former by the banks as a deposit to secure circulation, which they are to receive up to the par value of the bonds. He proposes (Secs. 5 and 6) to allow national banks under certain conditions to deposit U. S. notes, treasury notes or silver certificates with the Treasurer of the United States and receive in return therefor their own circulating notes to an identical amount; provided that the total of all government notes thus deposited shall not exceed two hundred millions of dollars; and later to issue further two and one-half per cent. bonds identical with those already described and charge these against the money deposited by the banks at the market price—not less than par; such bonds to become security for the notes issued to the depositing banks and the money which they have previously deposited to be covered into the division of issue and redemption in the shape of U. S. notes.

In its essence this proposition is simple. The U. S. Treasury, should it be carried out, will have funded two hundred millions of its U. S. notes, or "greenback" debt, in two and a half per cent. gold bonds; but this funding will be done only as fast as bank notes take the place of the U. S. notes and no faster. Thereby all contraction of the currency will necessarily be avoided. It is of course conceivable that the banks might in the future sell their bonds and retire the circulation with the proceeds; but such contraction, if it took place, would be right and desirable, as the only reason why a bank should retire its

circulation would be because it was excessive and could not be kept out in profitable use. But the change in the position of the Treasury in the matter of the relation of its demand liabilities to its reserve would be great and salutary. Of the 346 millions of U. S. notes outstanding, 200 millions would be locked up in the division of issue and redemption, which would have, under Sec. 1 of the Gage bill, a gold reserve of 125 millions, to redeem the other 146 millions of U. S. notes and the 110 millions of treasury notes, a reserve of almost 50 per cent. That this would be amply adequate, few who have experience in such matters will hesitate to believe.

We may properly ask, how the silver certificates are to be treated under this plan; and it must be admitted that there is no plain and unmistakable answer to our question in the bill itself. So far as the writer is aware, there has never been a direct demand for the redemption of these certificates in gold; they have been treated as warehouse receipts, entitling the holder to silver dollars which have been stored for his benefit. They have been kept at a parity with gold by the fact that the Treasury receives them at par in payment of debts due to itself, whether paid at Washington or at the various sub-treasuries. Secretary Gage, in his bill (Sec. 2), provides simply that they shall be redeemed "in accordance with the terms of existing law"; but in his testimony before the House Committee it is evident that he contemplates the possibility of having to redeem them in gold. This being so, it is strange that he does not make the same recommendation as to the silver certificates as is made by the Monetary Commission (Sec. 13d, and Sec. 17); viz: that silver certificates shall be issued hereafter only in denominations of \$1, \$2 and \$5, and that no U. S. note or treasury note "of a denomination less than \$10 shall hereafter be issued." (Both plans, be it said, provide that no bank notes shall be issued of a denomination less than \$10.) Now there are more than 350 millions of dollars in circulation in notes of \$5 and under, of which only about three-sevenths are silver certificates. If silver certificates were substituted for the remaining 200 millions, 75 per cent. of the silver certificates would be in a form and use which would preclude their coming

in for redemption in gold. For small bills of \$5 and under are not used by the exporter, who must have gold for shipment; he cannot get them in sufficient amount nor would he take them if he could. The physical impossibility of either collecting or handling millions of dollars in small notes would completely bar all danger of such redemptions; only a silver panic would bring them in, and that could not arise with the gold standard assured. It is easy to talk glibly about the danger of all the silver certificates being presented for redemption at once; practically it would be quite as easy to bale out New York harbor with a teaspoon.

The nature of the causes which may produce gold withdrawals seems often to be woefully misunderstood. The Bank of England is subject to constantly recurring periods when gold is demanded for export. Such demands cannot be called, *per se*, either good or bad; they are evidence of certain financial and monetary conditions, just as the reading of the thermometer is evidence of the temperature of the air about the bulb. And we have in this country note redemptions and gold withdrawals of exactly the same character. But the alarming withdrawals in 1894 and 1895 were totally different; in them the prominent element was fear—fear that the gold supply would be inadequate, that the Treasury would not use the only means it had to protect itself, and that the silver basis which many openly desired might be brought upon us after all. But with the gold standard established and proclaimed, either avowedly as in the plan of the Monetary Commission, or by indirection, as in the Gage bill, that cause for gold withdrawals would disappear. The question is not to provide a reserve to cover the impossible and inconceivable—we might as well expect banks to keep enough cash on hand to pay all their deposits—but a reserve wholly separate from the ordinary receipts and disbursements of the Treasury and adequate to meet real demands, with a distinctly large margin of safety.

We have seen, then, that the Gage bill reduces the demand obligations for which the Treasury may be called upon to furnish gold, by funding them to an account not exceeding 200 millions, the details of the funding process being so arranged

as to prevent wholly the possibility of any contraction of the currency in the process. With this we may now compare the plan of the Monetary Commission.

In the introduction to their report they express a wish "to avoid the issue of interest-bearing bonds, except in case of unlooked for emergency"; but they make provision to "confer the power to issue bonds when necessary for the preservation of the credit of the government." But the same power already exists, it should be said, under the provisions of the resumption act of Jan. 14, 1875. The plan of the Monetary Commission enlarges this power only in providing for the issue of bonds "bearing interest not exceeding 3 per cent., running twenty years, but redeemable in gold coin, at the option of the United States, after one year." These bonds are to be issued solely for the purpose of maintaining the redemption fund and the proceeds are to be paid into the division of issue and redemption. Specific injunction is further laid upon the Secretary of the Treasury (Sec. 10) to maintain the gold at such sum "as shall secure the certain and immediate redemption of all notes and silver dollars presented, and the preservation of public confidence"; the Gage bill contains nothing similar to this. Doubtless because, in the first place, it was not thought that the redemption fund would need replenishing, and besides, in the event of an unexpected crisis, the present power to sell bonds was considered ample.

The remaining features in the two plans which invite comparison are those looking to changes in the laws now governing the issues of notes by banks. We shall again do well to look first at the introductory statements of the respective authors.

Secretary Gage thus states his aim: "to take an initial step toward a system of bank-note issues without the conditional deposit of public bonds therefor," his expressed belief being that the public debt of the United States should be gradually reduced and finally extinguished; in which event, if there be any bank-note issues whatever, they must be on a different basis from the present.

The Monetary Commission (Secs. 3, 4 and 8) aim "to provide a paper currency convertible into gold and equal to it in

value at all times and places," adequate to the general and usual needs of business, but capable also of growth and elasticity, adjusting itself automatically and promptly to all variations of demand, whether sudden or gradual; and "to accomplish these ends by a plan which would lead . . . by gradual and progressive steps, without shocks or violent change, to a monetary system which will be thoroughly safe and good." A wider and perhaps vaguer aim; but so far as statement of purpose goes, Secretary Gage and the Monetary Commission are, we may safely say, in substantial accord. Both would agree that the present position of the Treasury, in the matter of its demand liabilities, is precarious, that it has given rise to grievous trouble in the past and that the recurrence of similar trouble in the future is in no wise impossible; that a system of banking currency may be perfectly safe, and if safe, vastly more beneficial to the country at large than a system of government notes like the present. The differences between the two plans, however considerable, are rather differences of method and pace than of aim and belief.

The Gage bill provides for the continuance of the method, whereby national banks are allowed to issue notes secured by pledge of U. S. bonds, substantially as at present; but circulation may be issued up to the face value of the bonds, the tax on this circulation is reduced by one-half, certain unwise restrictions on the freedom of the banks in issuing and withdrawing circulation are removed and the redemption fund which the note-issuing bank must maintain is doubled. There is, moreover, no provision looking to the gradual and ultimate withdrawal of this kind of circulating notes. But in addition to these secured notes a tentative step is taken further in the direction of notes secured only by the general assets of the issuing bank. Any bank which has deposited U. S. bonds—or notes or silver certificates to be converted into bonds—to the amount of fifty per cent. of its capital, may issue unsecured notes to the amount of twenty-five per cent. of such deposit, such additional circulation to be a first lien on all the remaining assets of the bank and the bank to pay on this portion of its circulation a special tax of two per cent. per annum. Here,

then, is a provision for a modicum of *banking currency*, which at first sight seems like a patch of new cloth on an old garment. But the analogy is only specious; even if, as a matter of banking theory, it may be fair to say that if the one system of note issues be wise the other can hardly be. What we have to face now is a definite condition; the worse that condition is shown to be, the slower perforce must be the recovery, and the more uncertain and dangerous would be the operation of extreme and violent remedies. We have grown accustomed, by the practice of a generation, to bank notes which every one believes have at least the merit of safety. Inadequate and faulty as such a system of note issues may be, the note-issuing banks and the note-using public cannot change their practice in a day. If the Gage bill be deemed feeble and unsatisfactory in this point—an opinion which the writer would share—its gravest defect is that it makes no provision for the gradual elimination of the old system, not that it introduces something new.

The safety of this new provision cannot reasonably be questioned. The leading argument against any system of *banking currency*, i. e. notes secured by the general assets of the issuing banks, is that it opens the door to a dangerous inflation. The door is already open, it may be said in passing, to an equally dangerous inflation by loans and book credits; but this is apart from our present discussion. No one can claim that the possibility of any dangerous inflation is concealed in the provisions of the Gage bill. The highest possible total bank circulation could only equal the capital of the banks, approximately 631 millions (Report of Comptroller, 1897, p. XIX); the highest possible unsecured circulation would be reached if the banks were to take out secured circulation to the amount of 80 per cent. of their capital and unsecured circulation to the amount of 20 per cent., say 504 and 126 millions respectively. And to reach this amount of unsecured circulation the banks would have to increase their secured circulation 150 per cent., the present amount being only about 203 millions. Any such enormous addition to the secured circulation could only be made after a considerable lapse of time.

The remaining provisions of the Gage bill bearing upon bank

note issues aim to expedite the process of redemption. No notes are to be issued of less denomination than ten dollars; notes are to be redeemed at the sub-treasury in New York, and the Comptroller may designate other sub-treasuries for the same purpose. As is well-known, the smaller the denomination of the note, the less likely it is to be presented for redemption until worn out; while the fact that they can have notes redeemed near home will doubtless induce banks to send in notes which they do not care to ship all the way to Washington as at present.

The essential features of the plan of the Monetary Commission are as follows.

The total issues of any national bank shall not exceed the amount of its paid-up and unimpaired capital, exclusive of so much thereof as is invested in real estate. The exception is important and wise. All who have experience will agree that real estate is not fit security for an issue of demand notes. The exception is doubtless meant to cover both real estate held for banking purposes and that taken as security for debt, in other words the two items in the national bank returns to the Comptroller headed "Banking house, furniture and fixtures" and "Other real estate and mortgages owned." But in the return of Oct. 5, 1897, these two items amounted to a total of 108 millions upon a total capital of 631 millions, or about 17 per cent.; in so far the total possible note issue is less than that possible under the Gage bill. Further, it is provided that up to an amount equal to 25 per cent. of the bank's capital stock its notes shall be secured by bonds at 95 per cent. of their market value. This would call for a secured circulation of about 158 millions, or three-quarters of the amount of the present secured circulation. But it is provided that after five years the amount of bonds required to be deposited shall be reduced each year by one-fifth; thereby bringing to an end the compulsory deposit of bonds ten years after the passage of the act. The remainder of the authorized notes—to the amount of 75 per cent. of the paid-up and unimpaired capital, exclusive of the amount invested in real estate—may be issued against the general assets of the banks, subject, however, to a

tax of 2 per cent. per annum, payable monthly, on notes in excess of 60 per cent. of the bank's capital, and to a tax of 6 per cent. on notes in excess of 80 per cent. of its capital.

A guaranty fund is provided by requiring all banks, before receiving circulation, to pay into the Treasury in gold coin 5 per cent. of the circulation to be received; from this fund are to be paid the notes of failed banks and any sum thus paid is to be collected from the assets of the bank. If this latter cannot be done, the Comptroller is authorized to assess all banks in proportion to their outstanding notes a sum sufficient to make good the 5 per cent. guaranty fund.

A redemption fund of 5 per cent. is required as at present, with a provision for the establishment of additional redemption agencies.

A franchise tax of one-eighth of 1 per cent. on capital, surplus and undivided profits, is also proposed; this is new both to the present law and to the Gage bill. The collusive transfer of stock within sixty days before the failure of the bank is prevented by a provision making the original holder liable for all calls on such shares in the event of failure.

The above sets forth the essential features of the two plans in the matter of bank note issues; it remains to compare and criticize, if need be.

The Gage bill both provides for and encourages an *increase* in the amount of notes secured by pledge of U. S. bonds, by authorizing an issue of funding bonds not exceeding two hundred millions and by offering the privileges of issuing unsecured circulation to those banks which shall have taken out secured circulation to the extent of half their capital. The plan of the Monetary Commission, on the contrary, allows an immediate reduction of the secured circulation and looks to its complete disappearance in ten years. The temporary character of the former plan is evident, especially in view of Secretary Gage's own statement that the public debt ought to be gradually reduced and finally extinguished. We may neglect the question of political expediency, which we saw at the outset undoubtedly influenced the form of the Gage bill and ask which is the sounder and wiser economically, the short tentative step

in the direction of a banking currency taken by Secretary Gage or the longer and more pronounced one of the Monetary Commission. Into the *ultima ratio* of a banking currency, a discussion of its theory, the writer does not propose to enter. We will assume, on the contrary, as is done by the authors of both plans, that such a currency, in some form and to some extent, is both safe and desirable; which measure is the better practical one to attain it?

Under the Gage bill the Treasury guarantees such currency to the holder; he is therefore as secure against loss as he is now. And the Treasury cannot lose; the total amount of such currency possible under present conditions would be less than 5 per cent. of all the assets of the banks, to say nothing of the guaranty fund derived from the annual tax of 2 per cent. It is more probable that but little unsecured circulation would be taken out at all, as a bank must first invest half its capital in bonds before it can take out any unsecured circulation whatever. If that be the case, such unsecured notes would come into being only as an emergency currency in times of stress, thereby becoming, in a sense, legalized clearing-house certificates in small denominations. Perhaps that is the Secretary's intention; at all events it must be noted that under normal conditions and present interest rates no large issues of such currency could be looked for.

The Gage bill, therefore, cannot be said to take any real step towards a banking currency, and it fortifies and increases greatly in amount the existing secured note circulation; without providing in any way for its gradual decrease and withdrawal. The measure of relief which it would furnish the Treasury would be great and salutary; to the community and the banks, except in so far as the Treasury's welfare is their own, it offers little or none.

The Monetary Commission make their own argument (Report, pp. 27ff.) as to the safety of the unsecured currency proposed in their plan. To this the doubter may be referred; it is, in general, sound and cogent. Still, there are questions which may honestly be raised—questions suggested rather by habit and sentiment than by intrinsic reason, but yet worthy to be reckoned with.

It is an essential of a good banking currency that the notes shall go home for redemption promptly and speedily when not needed. But our present bank note circulation, when sent in for redemption, is usually put out again by the issuing bank as soon as possible, without much regard to the conditions of the market. The causes which lead a bank to increase or retire its circulation are to be sought in the market price of U. S. bonds rather than the demand for currency. If bonds are thought temptingly low, the bank buys and takes out circulation in the hopes that the notes may bring in a tiny secondary profit; if bonds seem high, the bank reverses its operation. The movement of such notes is therefore sluggish and the increase or decrease is not necessarily connected with the fluctuations in the demand for circulating notes. In Canada the high point of note issues each year is about 20 per cent. greater than the low point; a state of things unknown with us. Will our banks change their practice under changed conditions, sending home their neighbor's notes speedily and keeping their assets liquid against the return of their own notes? The obvious answer is that the notes *must* go home, that the self-interest of the several banks will of its own accord compel it, each bank seeing that the notes of its neighbor fill a place and meet a demand which its own notes might otherwise take up. But there may seem to be room for question whether this necessary change in practice, so indispensable to a sound and healthy banking currency, will be made at once and completely by the banks. The fact that the circulating notes will be of larger denominations than at present will do much to aid in bringing about speedier redemptions; and, altogether, the objection probably has sentimental rather than real and practical weight.

Another factor may justify some uncertainty as to the operation of the plan of the Monetary Commission. At present, though the national banks may properly be said to guarantee the whole national bank note circulation, inasmuch as they are required to receive such notes in discharge of debts due them, the bond security upon which the notes are issued deprives such guaranty of all the nature of a burden. With notes issued

against banking assets the case will be different; besides the 5 per cent. guaranty fund which must be paid in, each bank is liable to be called on for an indefinite sum to make that fund good. Examined carefully in the clear light of figures and past facts, any fear which may arise on this score is plainly baseless; but it is to be regretted that the Canadian system was not followed in this respect, limiting the additional liability to a definite sum—in Canada one per cent. per annum of the amount of their circulation. A sentimental fear, though groundless, might act at the start as a deterrent in keeping out the very banks which from the prudence and conservatism of their management are the ones best qualified to issue notes.

Strong objection is raised to the plan of the Monetary Commission, even by advocates of the gold standard, on the ground that it is an inflation measure. Careful examination will not justify this contention. The highest conceivable addition to the circulation—assuming the capital of the banks to be unchanged—would be an amount equal to the difference between the present secured circulation—say 200 millions—and the capital *less* real estate investments—say 520 millions—or about 320 millions. But the tax of 6 per cent. on circulation in excess of 80 per cent. of the capital will entirely preclude the issue of such excess in normal times. Further there is specific provision for the immediate cancellation of U. S. notes and treasury notes, when redeemed, up to the amount of 50 millions; for the further cancellation from time to time of such notes, when paid, in amounts equal to the increase in national bank notes; and for the complete retirement and cancellation of all such notes within ten years after the passage of the act. Now assuming the possibility of a temporary inflation at the outset, we may look for a rise in prices accompanied by an increase of imports and a reduction in exports leading ultimately to gold shipments. But notes presented then for gold must be cancelled when redeemed, not held to be paid out again as now, thereby reducing, *pro tanto*, the amount of currency in excess.

A sudden inflation, too, can be brought about only by all the banks rushing in and taking out circulation to the full extent

allowed by law; but this is, in the nature of things, impossible. Timidity, and not rashness, is the general characteristic of banking methods, especially in the face of new and untried conditions. If there be any reason for apprehending that the banks would not all take out circulation under the plan, there can be no fear of undue inflation; the two are mutually exclusive.

There are three points to be covered by any financial legislation which aims to be sound and thorough; first, it must remove doubt as to the standard of value in the United States; second, it must ensure the absolute safety of the Treasury in the matter of its demand liabilities, and, third, it must provide a better bank note currency, the relative importance of these requisites being in the order stated.

As to the first, either of our two plans is adequate and ample. We should cease to be the only civilized nation on earth that clings in terms to what it has discarded in practice and pays for the privilege with impaired credit and ever recurrent spasms of financial distress. As to the second, the treasury is secured under either plan; but the Gage bill provides for the continued existence of the worst legacy of the civil war, the "greenback" debt, a legacy with which our fathers never intended to burden us. As to the third, the Gage bill errs on the side of conservatism and safety; the plan of the Monetary Commission goes much farther afield in the line of experiment, without abandoning, however, the solid basis of established practice and sound inference.

Neither measure is likely to solve our financial questions perfectly and for all time; we have not reached the stage in our evolution when ideal measures can spring at once from human brains. Neither measure is likely to be passed in form; at this very writing comes the report of a third plan prepared by the Committee of the House on Banking and Currency. Possibly this last may be the best of the three; but if so, it will be because the others preceded it, in which case their work will have been done.

We have returned to our original proposition, to wit; that, however slow and disappointing the progress of currency reform may seem, a review of the advance already made

must be reassuring. The present din and uproar seems fatal to sober thought; we are berated for our sluggishness and hesitation about rushing into a senseless war by leaders many of whom would pay the cost of that war by "coining a vacuum" or issuing more greenbacks. If true patriotism consists in striving for our country's good, not in frothy and maudlin mouthings under the plea of suffering humanity abroad, to which at home we turn a deaf ear, the work of currency reform is no mean task for the patriot; and honest effort to that end has its reward.

ALFRED L. RIPLEY.

Boston, April 10, 1898.

THE CONCENTRATION OF INDUSTRY IN THE UNITED STATES.

THE chief mission of the student of economic conditions is to investigate social changes that are taking place, and point out their influence upon the welfare of society. Among these changes there are certain movements which it is only possible to measure by the use of statistical methods. It is well known by economists that a profound transformation in the organization of industry is now taking place in all the leading manufacturing countries. The régime of household production has given place to the factory system. The individual teamster has been supplanted by the transportation companies. This transition has now advanced to the second stage, where the smaller enterprises are being eliminated, and the prosecution of industrial work concentrated in large establishments, and relatively fewer hands. In no country is this movement more pronounced than in the United States, and in no country can its course, untrammelled as it is by old customs and prejudices, be studied with better advantage. It is our purpose, therefore, as far as statistical material will permit, to show the character of recent changes in the organization of industry in this country, the extent to which they have already progressed, and, finally, to discuss some of the more important consequences that result from them.

In order to show the extent to which industry is being concentrated in fewer but larger establishments, it is desirable to have information showing, for as long a time as possible, the number of establishments in each industry, the number of employés in each establishment, and the value and quantity of the product of each. To fully bring out the significance of the movement it is necessary to know, not only the average size of all establishments, but the number of establishments of each size. The bare statement that the number of employés per establishment is a certain number, is of value, but it is more important to know the number of establishments

employing less than 10 hands, the number employing from 10 to 19, etc. Thus, for example, if there were five establishments employing two persons each, and one establishment employing 590, the average number of employés per concern would be 100, while in reality fifty-nine sixtieths of all employés are employed in establishments with 590 employés. Unfortunately the material collected in connection with the various censuses has not been presented in such a way as to enable us to obtain this information. We are therefore forced to content ourselves with information showing only the average importance of industrial enterprises. Though the information here afforded is thus not as complete as is desired, it is yet sufficiently full to show the general features of the movement we are considering.

A manufacturing establishment, according to the definition of the census, is any place in which products are manufactured during the year to the value of \$500. The census figures, therefore, can fairly claim to include all work at all deserving of the term manufacturing. Owing to the fact that the changes in the methods of manufacture have necessitated changes in the classification of industries, it is not feasible to attempt to carry our inquiry back to the ninth census, 1870. In the following brief table is shown, for all manufacturing industries combined, the number of establishments, the number of employés and the value of their product, as reported at each census, 1870, 1880 and 1890, with a calculation of the average number of employés and value of product per establishment.

Year.	Establishments.	Employees.	Product.	Per establishment :	
				Employees.	Product.
1870	252,148	2,053,996	\$3,385,860,354	8.15	\$13,428
1880	253,502	2,700,732	5,349,191,458	10.66	21,101
1890	322,638	4,476,884	9,056,764,996	13.88	28,071

From this table it will be seen that, while the number of establishments increased scarcely at all during the decade from 1870 to 1880, or but 0.54 per cent., the number of employés increased 31.49 per cent., and the value of the product 57.79 per cent., and that while the number of establishments increased from 1880 to 1890 but 27.27 per cent., the number of employés

and the value of the product increased over twice as fast, or 65.77 and 69.31 per cent. respectively.

This table, however, is of value only as showing the most general features of the problem. There are so many qualifications that should be made, as the result of changes in methods of collecting the data from which it is compiled, and the changes in the character of the industries themselves, that a general statement like this can only be used with great caution. The question is essentially one that should be considered according to particular industries. Naturally the movement has taken place unevenly in the various branches. In some it is very marked, and in others less so, though there is scarcely one of importance in which this tendency toward concentration cannot be seen to some extent. It will be desirable, therefore, to consider the movement in a number of the more important industries separately.

Manufacture of Textiles. The manufacture of cotton, woolen and other cloths is not only one of the most important industries of the country, but is, par excellence, a manufacturing or factory industry. It is fortunate, therefore, that we are able to trace, as is shown in the following table, the organization of this important group of industries during four successive decades.

Industry.	Year.	Estab- lishments.	Employees.	Product.	Per establishment :	
					Employees.	Product.
Cotton manufacture..	1850	1,094	92,286	\$61,869,184	84.4	\$56,553
	1860	1,091	122,028	115,681,774	111.8	106,033
	1870	956	135,369	177,489,739	141.6	185,659
	1880	1,005	185,472	210,950,383	184.5	209,901
	1890	905	221,585	267,981,724	244.8	296,112
Wool manufacture...	1850	1,760	47,763	49,636,881	27.1	28,203
	1860	1,673	59,522	80,734,606	35.6	48,257
	1870	3,456	119,859	217,668,826	34.7	62,983
	1880	2,689	161,557	267,252,913	60.1	99,387
	1890	2,489	219,132	337,768,524	88.0	135,705
Silk manufacture....	1850	67	1,743	1,809,476	26.0	27,007
	1860	139	5,435	6,607,771	39.1	47,538
	1870	86	6,649	12,210,662	77.3	141,984
	1880	382	31,337	41,033,045	82.0	107,416
	1890	472	50,913	87,298,454	107.9	184,954

Industry.	Year.	Estab- lishments.	Employees.	Product.	Per establishment:	
					Employees.	Product.
Dyeing and finishing.	1850	104	5,105	15,454,430	49.1	148,600
	1860	124	7,097	11,716,463	57.2	94,488
	1870	292	13,066	(a)	44.7	(a)
	1880	191	16,698	32,297,420	87.4	169,096
	1890	248	20,267	28,900,560	81.7	116,535
Combined textiles....	1850	3,025	146,897	128,769,971	48.5	42,568
	1860	3,027	194,082	214,740,614	64.1	70,942
	1870	4,790	274,943	520,386,764	57.4	108,640
	1880	4,018	384,251	532,673,488	95.1	132,572
	1890	4,114	511,897	721,749,262	124.4	175,435

a At census of 1870, the value of fabric was given instead of value added to the material by dyeing and finishing as at other censuses.

This table shows in a striking way the steady and rapid movement toward the concentration of the textile industry in fewer establishments. In the case of the manufacture of cotton goods, the number of establishments was 189 less in 1890 than in 1850, a decrease of 17 per cent., while in the meantime the number of employes had increased 151 per cent. and the value of the product 333 per cent. As a result the average number of employes per establishment has steadily increased, being 84.4 in 1850; 111.8 in 1860; 141.6 in 1870; 184.5 in 1880, and 244.8 in 1890.

Concentration in the woolen industry has progressed with equal rapidity. In this case, however, the number of establishments increased until 1870, when there were 3,456 mills in operation; after which each decade witnessed a steady diminution in number; there being but 2,689 in 1880, or 767 less than in 1870, and but 2,489 in 1890, a still further loss of 200. The number of employes, on the other hand, has steadily increased. The average number of employes per establishment has thus increased in successive decades from 27.1 in 1850 to 35.6 in 1860; 34.7 in 1870; 60.1 in 1880 and 88.0 in 1890. In some particular branches of the woolen industry this concentration has proceeded at an extremely rapid rate. Thus, for example, the number of carpet mills, which in 1870 was 215, decreased in 1880 to 195 and in 1890 to 173. In spite of this decrease in the number of mills, the number of employes increased from 12,098 in 1870 to 20,371 in 1880, and 29,121 in 1890. The average number of employes per establishment thus rose from

56.3 in 1870 to 104.5 in 1880 and 168.3 in 1890, a tripling in the average size of establishments during the period.

In the manufacture of silk, and in dyeing and finishing, though the number of establishments has in general increased, the increase has not kept pace with the increase in the number of employés. In both industries, therefore, there is shown a concentration of work in larger establishments; the average number of employés per establishment in the silk industry increasing from 26.0 in 1850 to 107.9 in 1880; and in the dyeing and finishing industry from 49.1 in 1850 to 81.7 in 1890.

Combining the four branches of the textile trade, it is seen that while the number of establishments increased during the forty years considered but 36 per cent., the number of employés increased 248 per cent. and the value of the product 465 per cent. The average number of employés per establishment has thus steadily risen from 48.5 in 1850 to 64.1 in 1860; 57.4 in 1870; 95.1 in 1880 and 124.4 in 1890. In the case of all of the industries it is important to notice that the movement toward concentration has gone on more rapidly in the later years.

The tendency toward localization, or for similar establishments to group themselves in the same places, has been scarcely less strong, and has resulted in making four cities in different States the chief localities in which each industry is carried on; Philadelphia, Pa., in wool manufacture; Fall River, Mass., in cotton manufacture; Paterson, N. J., for silk, and Cohoes, N. Y., in the hosiery and knit goods manufacture. The enormous growth in the wool manufacturing trade during the last 20 years has been entirely confined to eight States in the East, while in the remaining States there has been an actual loss of 45 per cent. Philadelphia alone, in 1890, produced 21.82 per cent. of the entire woollens output of the country during that year.

Iron and Steel Industry. The transformation in the methods of the manufacture of iron and steel, and the great variety of the products, prevent us from tracing the evolution of this industry in as complete a way as was done for the textiles. The following table, however, taken from the general table of manufactures of the census of 1890, shows the movement in the more important branches during the decade from 1880 to 1890.

Industry.	Year.	Estab- lishments.	Employees.	Product.	Per establishment :	
					Employees.	Product.
Iron and steel.....	1880	1,005	140,978	\$296,557,685	140.3	\$295,082
	1890	645	152,535	430,954,348	236.5	668,146
Iron and steel, bolts, nuts, washers and rivets.....	1880	100	5,064	10,003,330	50.6	100,733
	1890	62	7,341	12,373,031	89.5	150,891
Iron and steel, doors and shutters	1880	6	223	495,060	37.2	82,510
	1890	7	53	88,515	7.6	12,645
Iron and steel, forg- ing	1880	91	3,210	6,492,028	35.4	71,341
	1890	90	4,448	9,042,563	49.4	100,473
Iron and steel, nails and spikes, cut and wrought, including wire nails.....	1880	62	2,910	5,629,240	46.9	90,794
	1890	138	17,116	34,227,517	124.0	248,025
Iron and steel, pipe wrought	1880	35	5,210	13,292,162	148.9	379,776
	1890	22	12,064	37,906,801	548.4	1,723,037
Total	1880	1,299	157,595	332,519,505	121.3	255,981
	1890	984	193,567	524,592,775	196.7	533,123

From this statement it will be seen, that, if we consider iron and steel mills proper, there has been a very great concentration of work during the decade from 1880 to 1890. The number of such establishments has decreased from 1005 in 1880 to 645 in 1890, while the number of employes has increased 11,557. While the average number of employes per establishment was 140.3 in 1880, it rose to 236.5 in 1890. The production of bessemer steel rails in 1890 was made by only 18 concerns, of which seven produced 95.57 per cent. of the total amount produced. As showing geographical centralization, five of these were located in Pennsylvania. This State produced in 1880, 46.81 per cent. of all iron and steel rails, and in 1890 68.79 per cent. Considering all classes of iron and steel works, other than those producing machinery and the like, it will be seen that there was an absolute decrease of 315 establishments, and an increase of 35,972 employes. The average number of employes per establishment thus increased from 121.3 to 196.7, and the average value of the product from \$255,981 to \$533,123.

Flour and Grist Mills. A study of the evolution of the milling industry presents special features of interest from the standpoint of our present inquiry, because it is one that originally

was extremely widely diffused. In spite of the seemingly local character of the work, there are few industries in which the movement toward concentration is more marked. Pres. Walker, the Superintendent of the Tenth Census, specially singles out this industry as an example of the tendency of manufacturing work to become centralized in fewer establishments. In his report on manufactures, he says, "In illustration of this wide diffusion of petty productive establishments (in early years), it is interesting to observe that while the settled area in 1840 was but little over one-half that of 1880, and the value of its manufactured product perhaps not more than one-seventh, or one-eighth, there were almost as many grist mills at the former as at the latter date, and an even greater number of saw mills." In 1840 there were 23,661 grist mills and 31,650 saw mills; while in 1880 there was 24,338 grist and but 25,700 saw mills. That this movement was even more rapid during the succeeding decade is shown by the following table.

Industry.	Year.	Estab- lishments.	Employees.	Product.	Per establishment :	
					Employees.	Product.
Grist mills -----	1880	24,338	58,407	\$505,185,712	2.40	\$20,757
	1890	18,470	63,481	513,971,474	3.44	27,827
Saw mills -----	1880	25,708	147,956	87,113,344	6.00	3,389
	1890	21,011	286,197	172,111,957	14.00	8,192

In both cases, therefore, there has been an absolute decrease in the number of establishments, while the number of employes and the value of the product has increased.

Agricultural Implements. In the manufacture of agricultural implements the tendency toward concentration was early apparent. In 1850 the average number of employes per establishment was five; in 1860, seven; in 1880, 20 and in 1890, 47. The following table shows the number and importance of establishments in this industry as reported at the last two censuses.

Year.	Establishments.	Employees.	Product.	Per establishment :	
				Employees.	Product.
1880	1,943	39,580	\$37,109,316	20	\$19,099
1890	910	42,544	49,668,386	47	54,581

Concentration during the ten years 1880 to 1890, it will thus be seen, was very rapid. The number of establishments

decreased over one-half or 53.17 per cent., while the number of employés increased 2,964 or 7.49 per cent. The average number of employés per establishment has thus more than doubled, rising from 20 in 1880 to 47 in 1890.

Other Industries. It would be too tedious a matter to follow this movement in every industry in the same detail as has been done in the more important industries that have been considered. The following brief notes therefore serve every purpose in showing that this movement is at once widespread and proceeding with rapidity.

In shipbuilding the concentration of work in fewer establishments has been very marked during the last ten years. In 1880 there was 2,188 establishments, and in 1890 but 1,006, a decrease of over one-half, though at the same time the number of employés increased from 21,345 to 23,266, an increase of 136.99 per cent. in the average number of employés per establishment. The manufacture of liquor, both malt and distilled, likewise showed a marked tendency toward concentration. The number of establishments producing malt liquors decreased from 2,191 in 1880 to 1,248 in 1890. The average number of employés, however, increased during the decade from 26,220 to 34,800, and the average number of employés per establishment from 12 to 28. The number of establishments producing distilled spirits decreased during the same period nearly one-half, or from 844 to 440. The average number of employés also decreased slightly, or from 6,502 to 5,343; but the average number of employés per establishment increased 50 per cent., or from 8 to 12.

In the manufacture of boots and shoes, the number of establishments increased 6.28 per cent., the number of employés 25.35 per cent. and the value of the product 32.88 per cent. The average number of employés per establishment was 57 in 1880, and 67 in 1890.

The number of factories engaged in the manufacture of paper decreased from 1880 to 1890 from 692 to 567, or 18.06 per cent. while the number of employés increased 21.07 per cent. The average number of employés per establishment was 35 in 1880 and 32 in 1890.

In the manufacture of glass, the number of establishments increased from 211 in 1880 to 317 in 1890, but the number of employes increased still more rapidly, or from 24,177 to 45,987.¹

There remains to be mentioned one industry in which the process of centralization of work in fewer and larger concerns has, within recent years, gone on with great rapidity, but which unfortunately cannot be accurately measured. Reference is made to the retail trade. In all the great cities, enormous apartment stores, as they are called, have sprung up, in which a business is now carried on greater than that formerly performed by hundreds of smaller and independent establishments. In many respects this growth of the large store, in which almost every kind of ware is handled, furnishes the most typical example of the movement which we are considering. The larger of these stores now employ thousands of hands; they have their agents all over the world; they frequently take the entire product of certain mills and factories, and indeed run extensive manufacturing plants in connection with their retail work. Their perfected delivery system now enables them to cater to the wants of customers living remote from their establishments, and even in different cities. There is every reason to believe that the department store is as yet in its infancy. There is practically no limit to which its development is possible. It is quite within reason to anticipate the creation of great concerns controlling stores in different cities all over the country. When we come to consider the results of concentration, it will be seen that the relative advantages and disadvantages of centralization in the retail trade constitute one of the most important and interesting branches of our inquiry.

The present study has been more particularly restricted to

¹ In presenting these figures, drawn from the tenth and eleventh censuses, the author is aware that somewhat different schedules and methods were employed in the two enumerations; and that in consequence the figures do not in all cases represent the actual movement that took place. As a result of these differences concentration in some cases was even more rapid than is represented, while in other cases it was less so. The figures as given, however, represent, with a fair degree of accuracy, the changes that actually took place. They at least establish by overwhelming proof the fact of the rapid concentration of industry in larger and relatively fewer establishments.

the manufacturing industry and commercial establishments. It should be noted, however, that the tendency toward concentration is not peculiar to these branches, but it is evident in almost every sphere of activity. The telegraph, telephone and express business have already come into the hands of a very few companies, and the movement on the part of the railways in a similar direction is so well known as to require but a bare mention. In all quasi-municipal duties, such as gas supply, electric lighting and street railways the movement is now in full swing.

That industrial work was centralizing in large establishments there was little doubt. The figures given above in a degree measure this movement and show how rapidly it is progressing. This concentration, however, is taking place in various ways. We have been able to trace but one of them. A second form of consolidation is that whereby kindred interests are grouped together under one management, as, for instance, in the very common practice for iron and steel mill owners to own and operate their own coal and ore mines, to manufacture coke, to operate railways, etc. A somewhat similar movement is that where manufacturers, as in the boot and shoe trade, organize retail stores for the disposition of their product. This form of concentration constitutes an important feature of the movement we are considering. Centralization thus means not only the carrying on of industry in large establishments, but the uniting together under one management of related industries.

A third form of centralization is that of the formation of agreements between different establishments in the same industry to operate their plants as one enterprise, or at least in harmony with each other. This object is usually secured by the formation of a so-called "trust," a form of organization, as is well known, where the different establishments are placed in the hands of trustees who issue to their owners certificates in proportion to their general interest in the trust. The formation of a trust does not necessarily mean the centralization of the work of production in a few hands. As a usual thing, however, it is found advantageous to shut down work in the smaller and increase the production of the larger plants which can be

more economically operated. This form of centralization, which is taking place through the formation of trusts, presents such special considerations as to make of it a problem quite distinct, though a part of the general problem of the concentration of industry. It will evidently be impracticable to enter upon its full consideration within the limits of this paper. It is important to notice, however, some of its general features as constituting a part of our subject.

The growth of the large establishment represents the normal evolution of industry, and, as such, is productive of no greater hardships than inevitably result from changes in industrial methods that are constantly taking place, and the inability of certain classes to accommodate themselves to changing conditions. The trust, on the other hand, represents what might be called a forced or abnormal, as opposed to the natural, centralization of industrial work. Matters have not been allowed to take their course. The large establishment has not been given time to demonstrate its superiority over smaller concerns by its ability to produce at a cheaper rate. The founders of trusts have not been content with the advantages which the superior organization of a large establishment ensures, but have sought to increase them by arbitrarily fixing prices, not as dictated by the cost of production and competitive influence, but by what the public can be made to pay. In railroad parlance, rates are not fixed according to the cost of transportation, but by what the traffic will bear. Thus, while the formation of trusts is undoubtedly dictated by the desire to cheapen production, the chief object in view is to regulate the prices that will be obtained for their products, by establishing a monopoly and controlling the market.

From the public standpoint, therefore, the trust presents both desirable and undesirable features. Which of these will predominate depends upon the policy pursued by the managers of each trust. It is this feature that makes the trust problem one quite distinct from that of the general question of the growth of the large industry, and has caused the former to meet with great and the latter with but little opposition.

The forces which are at work bringing about this concentration cannot be shown statistically. There is, however, no doubt as to what they are. Economy in operation is the great motive. The conduct of a business upon a large scale permits of the use of improved and expensive machinery, the greater division of labor according to aptitudes, the employment of more skilled overseers and foremen, and the reduction in the general expenses of superintendence and account. A large concern can purchase supplies upon a more favorable basis. It can consequently make use of refuse and by-products that are destroyed by the smaller establishments. The large establishment can, in general, keep its capital and plant more constantly employed. By manufacturing a variety of products it can accommodate itself to changing demands. It, moreover, is not dependent to a like extent upon uncertain orders as are the smaller concerns, but can in a way make its own markets, or at least determine more accurately in advance the probable demand for its products. Having a much larger market, a falling off in one quarter is frequently counterbalanced by an increase in others. These advantages are intensified where related branches of an industry are gathered together in one plant or under one management. A small concern must purchase many supplies which the large one can manufacture with profit for itself, with the additional advantage that it is always certain of having them of the character and at the time desired.

These are the motives leading men to carry on industrial enterprises upon a large scale. The two main conditions making it possible for them to do so are: first, the power to form corporations, thus permitting the aggregation of large amounts of capital, and secondly, the increased facilities of communication, which emancipates industry from local markets and throws open to establishments the trade of the world. In not a few cases the patent system has been responsible for the concentration of particular branches of work in a single or few hands. This cause has been particularly influential in the electrical industries, the control of patents rendering possible such establishments as the General Electric, the Westinghouse and

Thomson-Houston. The famous Pullman Car Company is a notable example of the working of this cause. Tariff legislation has also exerted a considerable influence. Its effect, however, has been both for and against the movement. But for tariff legislation it is probable that the concentration of industries by localities would have had a world-wide significance, and in a number of cases there would have possibly resulted the concentration of certain work in a single country, or even in a single locality. At the same time, the protection afforded by high duties has encouraged the consolidation of manufacturing interests, by making it possible for such combinations absolutely to control the market, and thus by keeping up prices make large profits.

In the foregoing we have considered, and as far as statistical material permits, measured what must be generally conceded to be the fundamental tendency in the modern industrial evolution. It is evident that the changes produced by it are such as profoundly to modify, not only the conditions under which industry must be carried on, but the conditions under which the great majority of the people must live and earn their subsistence. We could, therefore, scarcely assign ourselves a more important task than to attempt to point out in some degree the general effect that this evolution is producing upon the conditions of life.

As would be expected, a movement so wide-reaching and important as this exerts an influence in a great variety of ways. Let us first consider its most important effects from the general standpoint of society and industrial progress. We have already called attention to the most important of these: that of the increased economy of production. Society as a whole is vitally interested in any process or innovation by which a larger amount of wealth can be produced with a given effort. The development of the large industry stands for increased efficiency of labor and methods of production. Society is thus benefited by its extension in exactly the same way as it would be by the discovery of the utilization of a new force or mechanical contrivance. When one thinks of the

enormous number of men employed, not in productive efforts proper, but in the mere act of getting goods when made into the hands of consumers, and the expenditure of time and money by establishments competing with each other, it is possible to appreciate the vast margin of possible economy in the distributive branches alone of industrial work. It is one of the distinct efforts of modern times to do away with the middleman, and in this the consolidation of industries is the most effective agent employed.

The public also as consumers realize a great economy and advantage in dealing with large concerns. The responsibility of a large establishment is a much more serious matter than that of a small one. It is imperative with the former that it maintain the reputation of its goods. This is particularly true of the large retail or department store. The proprietor of a small shop to a large extent sees in each purchaser but a transient patron, and can thus practice deception without a corresponding prejudice to his business. Deception with the large store means the loss of an almost certain future customer. Again, the purchaser in a large store realizes a great economy in time through the fact that he is not required to search through twenty or more stores for what he wants, but can to a large extent make his purchases in one place with a minimum amount of effort.

These various economies realized by the large establishment are now so generally recognized that it is quite superfluous to comment upon them further. We, therefore, turn to a benefit resulting from the concentration of work, which either has been totally ignored or slighted in all discussions of the question, but which is nevertheless of prime importance.

Probably the most fundamental benefit resulting to society generally from production upon a large scale, next to that of economy, is the influence it exerts in steadying production. Ever since the inauguration of the modern industrial regime, industry has been periodically paralyzed, trade injured, and progress brought to a standstill by what are called "industrial depressions." The causes for the recurrence of these phenomena are but imperfectly understood by economists. In a

general way they are ascribed to over-production, but at the same time we are told that there is no such thing as real over-production until the wants of all are satisfied. Whatever the exact cause, it is more or less intimately connected with the law of supply and demand, or rather with the failure of this law to act.

As regards the action of the law of supply and demand, industry has passed through three successive phases; first the patriarchal phase, where each family produced directly for its own consumption; second, the division of labor period, where industry was differentiated into distinct trades; and third, where the individual tradesmen are gathered together in organizations which we call factories, mills, etc. Instead of executing orders, as was done by tradesmen of the second period, the wishes of consumers are now anticipated, and the factories turn out their product for an expected demand. With this has appeared a great danger, that of the intemperance of production, where more is produced than can readily be disposed of. This intemperance has become almost a regular phenomenon, producing alternate periods of good and bad times. When trade is good, and prices high, each establishment makes an effort to produce as much as possible, in order to take the utmost advantage of the good times. Production in the course of time is overdone. A reaction ensues. Production slackens. Employés are discharged, and a period of depression begins.

The injury resulting from this unstable condition of industry cannot be calculated. Any device which will to any degree regulate this intemperance, and steady production, must be welcomed as a great gain to society. This the large industry certainly tends to do. The attempt to control production so as to keep their plants in constant operation has been one of the great motives leading manufacturers to consolidate their enterprises and organize such combinations as trusts. The large establishment is able to command a larger market; it can offset falling off in demand in one quarter or in one commodity by the variation of trade in another direction or the production of articles. An establishment is thus far less sensitive to local harvests or other disasters. In the recent investiga-

tion that has been made of the extent of unemployment, it has been almost universally reported that unemployment is more frequent in the small than in the large establishments. The small establishment takes on and dismisses employés according to the variation in the number and importance of the orders it receives, while the large establishment, with a better control of the market, keeps a more stable force. No better demonstration of this fact could be given than the conditions giving rise to the great coal miners strike of last year, where 150,000 or more men left work. The reason for this strike was the inability of the mine owners to come to an agreement, either to fix a uniform rate of wages, or regulate the output of coal. The result was a too great production of coal and a consequent lowering of its price; and, as miners' wages, according to the system of the sliding wage scale, is determined by the price of coal, the earnings of the men were correspondingly reduced. This condition of affairs, moreover, was not unusual, as the coal trade has long been subject to alternate periods of over-production and cessation of work. The country was thus presented with the unusual spectacle of the workingmen demanding that the employers, the mine owners, should form a strong organization in order that production might be limited to the demand, and the operation of the mines be made regular from season to season. The coal mining industry thus presents a remarkable verification of correctness of the position here taken, that the concentration of industry tends to steady production and consequently to make more stable the employment of the workingmen. Whatever the abuses, therefore, that large establishments and trusts may give use to, their influence in lessening the frequency and intensity of industrial depressions is a service not to be lightly passed over.

Having considered some of the effects of the concentration of industry from the standpoint of society generally, we now turn to a much neglected phase of the question, that of the effect of the growth of the large industry upon the people as workers, either as employers or employés.

The consolidation of industrial establishments undoubtedly means the elimination of the small manufacturer and merchant.

This phenomenon has given use to a great deal of dissatisfaction, and has caused many to look upon the movement as an evil. A great deal of sentiment, it seems to me, has been wasted in regard to this point. The persons who are driven out of business are those who are the least fitted to survive. They are the ones who by tremendous efforts just manage to eke out an existence. The record of failures shows that the life of the small manufacturer or merchant is far from a secure or pleasant one. The least suspicion of hard times pinches them immediately. On the other hand, the organization of large enterprises requires, not only ability in the owners, but the highest order of technical skill, executive ability, and personal capacity in the numerous chiefs of departments and other responsible positions. The steam railways may have driven out thousands of independent teamsters, but it created positions requiring men of a far greater degree of intelligence and ability. The man of sufficient ability to succeed as an independent producer or merchant finds abundant opportunities for the display of his talents in the complex and highly organized large undertaking. Moreover, it should be borne in mind that this elimination of the independent manufacturer is characteristic of the prior phase of industrial evolution, where the factory was supplanting the artisan, rather than the present movement of the consolidation of factories. Thus, if we take the great iron and steel industry, the reduction in the number of establishments, during a decade, from 1299 to 984 represents a very great concentration during so short a period, while the number of individuals affected as employers, 315, is insignificant in comparison with the great number of persons concerned in this industry.

This last point brings us to a phase of the movement which, so far as I am aware, has received little or no consideration, either at the hands of the public or of economists, but which constitutes the really fundamental question to be considered in connection with the large industry. The elimination of small employers is a minor question compared to the benefits or disadvantages that result to the workingmen employed in these enterprises. It is difficult to understand why this question

should always be discussed from the standpoint of the employer, and scarcely ever from that of the employé. To every employer there are scores of employés. As a labor question, therefore, the important considerations involved are: what are the effects of the movement upon the welfare of the working-man, how does it affect his hours of labor, his wages, the constancy of his employment, his opportunities to advance in his work, etc.?

Let us state our position on this point before we enter upon its discussion. Whatever the effect of the concentration of industry upon the number of employers, its influence upon the employés is certainly good. We hope to show in the following paragraphs that its effect upon almost every feature entering into the welfare of the workingmen is beneficial.

In the first place the material conditions, or the environment under which the laborers carry on their work, is far superior in the large establishment. The large establishment means large mills, large plants. In the place of small buildings, often structures erected for other purposes and ill-suited for the work carried on in them, and with low ceilings and insufficient light, in which the small establishment was located, one now sees large specially-constructed buildings, with high ceilings, an abundance of light, good drainage and water supply. Here are found labor-saving machines, improved devices for guarding against accidents, for removing dust or other substances injurious to the health of the laborers. In the large establishment it is possible for the employers, or for the men themselves, to maintain various institutions for the latter's comfort, such as baths, libraries, club-houses, eating and lodging rooms for the unmarried men. To secure the needed room employers are more and more going to the outskirts of the cities, or even to the open country, to locate their plants. Instead of being located in narrow streets of the squalid quarters of a city, establishments of the larger concerns are now situated where the benefits of pure air and pure water can be obtained, where the men and their families can live in detached cottages instead of crowded tenements, and where they can more readily become the owners of their own homes. These are points that cannot

be proven by the marshalling of figures. It needs but a slight acquaintance, however, with the actual conditions under which industry is now carried on, to perceive that the growth of the large establishment means the great improvement of the conditions under which the workingmen must perform their labor. One has but to glance at the conditions pertaining in the garment-making and tobacco manufacturing trades as now practised in our large cities, where, under the régime of numerous small shops, the sweating system holds full sway; and contrast them with those of the mill operatives, who have made the cloth, to realize the superiority of the latter. The effort to abolish the sweating system is the attempt to have this work performed in large mills and regularly organized and equipped workshops.

It is now, moreover, pretty generally accepted that the state has a part to play in determining the conditions under which industry shall be carried on. Such legislation as the prohibition of the employment of children of tender age, the requirement that mill owners shall provide seats for female employees, separate toilet facilities for the two sexes, the maintenance of hygienic conditions, etc., have contributed greatly to improving the condition of the laboring classes. The weak point in this legislation has been the difficulty with which it is enforced. In the small and widely diffused shops such enforcement is often impossible. The growth of the large establishment simplifies greatly this task of the state. Concealment or evasion is here difficult.

The modern mill and factory hand works in a better environment than formerly. Does the centralization of work in fewer establishments tend to shorten his hours of labor, make his employment more stable, increase his wages, or give to him greater opportunities for advancement? Unfortunately in the attempt to answer this question we are confronted with the difficulty that no statistical material is existent that will enable us to contrast conditions as regards these points in the large and small establishments. We are forced, therefore, to rely upon certain general and collateral sources of information. This general information, however, all points one way. There

is every reason to believe that the condition of the laborer as regards wages and hours of labor is superior in the larger establishments. As regards one feature, that of the vitally important consideration of stability of employment, there can be little doubt. We have already commented upon the fact that the growth of large establishments tends to steady production. In doing this it must at the same time make employment more certain and continuous. The large establishment has an enormous capital invested in its plant and machinery, which to be remunerative must be constantly employed. It is no unusual thing for a large mill to be kept running for a considerable time even though the condition of the market is such that it is producing at a loss. With a better command of the market, also, there is not the same fluctuation in the number of workingmen employed, according as chance orders are obtained, as occurs to a large extent in smaller enterprises. The author several years ago had occasion to make a special study of industrial communities in Europe for the United States Department of Labor, which was published in its Bulletin. In this investigation a detailed examination was made of the conditions of labor at a number of the largest industrial concerns in the world, such as Krupp's iron works at Essen with its 25,000 or more employés, and the great Colliery of Anzin with its 10,000 or 11,000 workingmen. These communities represent the highest development of the movement towards concentration of industrial work, and in their study no fact of greater significance was brought out than the very great stability of employment there found. At Krupp's 21 per cent. of all the employés had been continuously employed over fifteen years, and 23 per cent. had been employed more than five, but less than fifteen years, or a total of 44 per cent. who had been in the employ of the firm more than five years. It should be remembered that the rapid increase in the number of employés within recent years necessitated the constant entrance of men to swell the number of those employed but a short time. At Anzin, an even greater stability was found: 12.32 per cent. had been employed thirty years, 27.83 per cent. twenty years, and 59.82 per cent. ten years or over; if we consider

only those employés thirty years of age or over, we find the very high percentage of 94.58 to have been employed ten years or over. Practically the same stability was found in the other industrial communities. These of course are but examples, but they are fairly representative of conditions where concentration has gone on to the fullest extent. Lack of employment is, if anything, a greater evil to the workingman than low wages. In increasing the certainty of his continuous employment, therefore, the growth of the large establishment renders him a great service.

Finally the fact should be noted that the aggregation of laborers in large establishments facilitates greatly the formation of strong labor organizations. As concentration goes on, therefore, labor organizations will become stronger, and as they do so, they will demand and obtain better wages and hours of labor. In no other way are the changed conditions of industrial methods of greater advantage to the laboring classes than in this greater opportunity that is afforded them to form organizations of all kinds for social purposes, and for the betterment of their conditions.

Every medal, however, has its reverse side. With the advantages resulting from increased opportunities of combination, the gravity of industrial contests will be proportionately increased. Strikes will probably not be as frequent or undertaken for as trivial causes as in former years. When they do occur, however, they are likely to be vastly more serious. Industrial disturbances surpassing any former ones in extent and severity can easily be anticipated, and it becomes more imperative to devise methods by which they can be avoided or settled. The large industry lessens the frequency of strife, but aggravates it when it does come.

Our task will not be entirely completed until we have asked ourselves what our attitude should be in regard to this movement that we have been considering. We scarcely need to repeat that we consider the movement towards concentration as one of progress, and therefore, to be at least let alone. The attempts that have been made to abolish department stores

in various cities, are thoroughly retrogressive measures and are doomed to failure. It is a dangerous thing for the state to interfere in any economic movement and attempt to direct its course. In the present case the movement should be allowed to work out its own destiny. In one important respect, however, this statement needs qualification. It applies to the normal movement of consolidation and not to the forced concentration, where the motive is rather to control prices than to cheapen the expense of production.

The formation of combinations for this purpose has thrown power in the hands of a few persons which they have not always used in a legitimate way. The influence of these persons both in our political and industrial life constitutes a real danger, from which the working of natural forces seems to afford no protection. The result of the abuse of this influence has been the attempt in many States and in Congress to enact legislation to control capitalistic combinations. From a purely economic, the question of concentration of capital has thus become a political one. Space will not permit us to make any extended discussion of this subject, and we, therefore, limit ourselves to a statement of the fundamental principle that should guide the legislatures in their action.

The advantages of production upon a large scale are so manifest that it would be unfortunate to retard the movement in any way. On the other hand, the public should not be left at the mercy of a few men. The great evil is the power possessed by a few individuals arbitrarily to fix prices, and this, if possible, should be controlled by the state. As yet the means to do this have not been discovered. It would seem to us that this has been because a radically wrong line of policy has been pursued. Legislatures have failed or refused to recognize the advantages of production upon a large scale. They have looked upon large enterprises as an evil in themselves and essentially detrimental to society. Their efforts, therefore, have been directed toward the prevention of the formation of combination of establishments. In so doing they have attempted to stem an irresistible economic movement. The true line of policy is to recognize that the consolidation of

industrial enterprises is inevitable; and thus instead of attempting to prevent, seek rather to control these combinations.

The first steps toward control is that of publicity of accounts. The state should require corporations to make annual reports concerning their operations. This is the system that has been pursued by the federal government as a part of its plan to regulate railways, and by many States to control railways, gas and water companies, insurance organizations, etc. The requirement of reports will not solve the problem, but it will be a first step and make any subsequent action easier and more intelligent.

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NOTES.

Professor Pantaleoni, the eminent Italian economist, editor, and statistician, who recently left the University of Naples to take the chair of political economy in the University of Geneva, delivered a notable and characteristic address on entering upon his new duties, Oct. 22, 1897. His subject was "Du caractère logique des différences d'opinions qui séparent les économistes." Referring to the tendency to classify economists into "schools," he asserted that he belonged to no school, that in fact no schools exist except two: "the school of those who understand political economy and the school of those who do not." "Ces deux écoles se font naturellement toujours la guerre." Differences in points of view, however, must naturally appear in a science treated by philosophers, business men, jurists, historians, mathematicians and litterateurs; where actual disagreements occur, they are not so much disagreements about general causal sequences as about the explanation of specific conditions. Economists may agree in deducing the effect or tendency of given causes while reaching divergent solutions of the *inverse* problem: given an economic effect, such as a fall in prices, what were the causes which produced it? Again, economists may agree on the working of social forces, e. g. in the law of wages, without agreeing at all as to its goodness or badness. Finally, many apparent conflicts are due to imperfect generalization. Economic science, like every other, is showing a tendency to gather up old propositions into larger generalizations. Exchange may be viewed as a special case of production or production as a special case of exchange, Nature being substituted for the seller. "Complementary goods," once treated as "peculiar cases of value," are to-day recognized as the general case. The three factors of production are an instance of complementary goods.

As to the relation of economics to sociology, Prof. Pantaleoni shows that human actions may be roughly classified into compulsory, contractual and altruistic. Only the second are economic. Sociology treats of all three. The study of political organization comes under the first.

City Farm Training Schools. During the past four years the Vacant Lot Farm plan has established itself as one of the most hopeful and practicable of all so-called remedies. The expenditure

on material is inconsiderable; the returns are immediate to the individual and satisfactory to the community; while there are none of the demoralizing effects of gratuitous charity. Its chief advantage lies in the fact that it is a farm training school.

The idea originated with Mayor Pingree, of Detroit, who in 1894, through a committee, put under cultivation 430 acres and set 945 families to work. There were many disadvantages incident to a new undertaking; but as the experiment cost about \$3,600 and the value of the crops produced was estimated at \$12,000, the plan was considered a success.

In 1895, New York, through the Association for Improving the Condition of the Poor, organized a Committee on the Cultivation of the Vacant Lots by the Unemployed. The same year twenty other towns and cities experimented, twelve reporting favorable results.

The following year there was a lull in the number of cities to undertake the work; but those who had already begun did better, and in 1897 the important cities of Chicago, Dayton, Kansas City, Philadelphia, and Providence adopted the plan, which, with those who had succeeded and continued from past years, made a total of 17 cities.

The work especially commends itself to municipal control; but at present only Detroit and Buffalo have adopted that method entirely. Toledo, O. and Reading, Pa. tried for one and two years respectively, but abandoned it, the one discouraged by bad seasons, the other by lack of appropriations.

New York in 1898 begins the fourth season of the Vacant Lot Farms, the movement being again under the auspices of the Association for Improving the Condition of the Poor. Four tracts of unused land, amounting to 321 acres in Pelham Bay Park, have been placed at the disposal of the Committee for the summer. The differentiating feature of the plan for 1898 is the co-operation which has been made with Typographical Union No. 6, whose out-of-work members will be given allotments. There are other co-operative relations between the Union and the Association which will be watched with great interest.

The Union proposes to give free round tickets to members on the out-of-work list, but no more than thirty tickets will be given to any one member, because a crop can be raised in twenty days, distributed throughout the entire season. The planters will go and return the same day, because it is not intended to maintain a colony,

as the object of the farm is to educate the members in raising vegetables, for the sake of giving them temporary relief while looking for work and to enable them to make something from the produce which they raise. Each planter will be provided with a small notebook to keep careful account of the crops raised and the produce sold, and he must report to the Union's agent each morning when he presents himself for work and also sign the books on leaving the farms at night. The average plot will be half an acre and will be in possession of the member through the entire season.

The working members may make any arrangement among themselves. For instance, two or more may work several plots in partnership, or take care of each other's plot in the absence of the owner for a day or two, but if any member neglects his plot he will be notified of that fact, and if it becomes apparent that he has abandoned the work, his plot will be given to another, who will pay out of the produce a sum agreed upon between him and the Land Committee.

A community tract will be held for members who do not wish individual plots, and work will be given to those who for any reason think that they cannot hold an individual plot during the entire season.

The Typographical Union No. 6 have committed themselves to this project with the idea that, if its success can be demonstrated, they will another season buy a farm of their own, to which their out-of-work men can be sent for employment.

TOLMAN, TABOR, DAWE.

Stability of Prices. A very important contribution to the question of the relative stability of prices under monometallism and bimetallism was made by Professor Edgeworth in the *Journal of the Royal Statistical Society* for March, 1897. His discussion is somewhat mathematical, which fact accounts for the rather scant attention which has been paid to it. Bimetallists and, since the time of Jevons, most monometallists have assumed that bimetallism, if once in operation and equilibrium, would secure a mutual correction of the fluctuations in value of the two metals. The fall in the value of gold in the fifties was much modified by the existence of bimetallism in France, which in fact served to spread the effect of the gold discoveries over the currencies of the whole world, silver standard countries included. This "compensatory" or

"equilibratory" action has been the main support of the bimetallists of Europe and the "International bimetallists" of America. Professor Edgeworth shows that bimetallism does hold out the prospect of *some* equilibration, but argues that the effect is too weak to be worth serious consideration. When gold is yoked to silver, as when one ox is yoked to another, the two are *a little more likely* to keep in the middle of the road than when left to themselves. But the excess of probability is small. The result bears some resemblance to the following case of numbers: Each of two hats contains slips with the digits 0, 1, 2, 3, . . . 9. Digits are taken at random from one of the hats. They fluctuate in value, but group themselves about $4\frac{1}{2}$ as an average. If each digit thus withdrawn be combined with a digit from the other hat and the mean of the two taken, it is a little more likely than not that this mean will lie nearer $4\frac{1}{2}$ than the original digit. Let 3 be drawn from the first hat and 7 from the second. Their mean, 5, is an improvement on both 3 and 7 in the sense of being nearer $4\frac{1}{2}$; 3 is improved by union with 4, 5, 6, 7, 8. It is injured by union with 0, 1, 2, while union with 3 or 9 gives neutral results. Extending the reckoning to the other digits besides 3, we find that in as many as *forty* cases out of a hundred no advantage results from union. This simple example is not a very good one, as the distribution of digits does not correspond to the "law of error." The case of rainfall is next taken. The rainfall in a particular locality fluctuates much from year to year and probably in close correspondence to the law of error. The same is true of a second locality. The question arises, in how many cases out of a hundred will the figure for the rainfall of locality A be improved (brought nearer the mean rainfall) by random union with a figure for locality B? The answer is about sixty-four.

But we wish to know not only *how often* gold would be benefited by union with silver, but also *how much*. This quantitative element is introduced by comparing the "probable error" for the double standard with that for the single standard. The theoretical ratio of these two errors is 70 to 100. This ratio is increased to 90 to 100, or probably more, by taking into account the influence of credit and other concrete circumstances affecting the fluctuations of the monetary standard. That is, bimetallism, at best, can only be expected to cut off ten per cent. or less of the fluctuation evil of the gold standard. Nine-tenths or more remain.

"To sum up. Suppose that international bimetallism could be got to work, having surmounted all the dangers which threaten its

infancy, the scramble for gold, the inundation of silver, the evasion of business men 'contracting out' of the bimetallic money, and other risks . . . then the advantage in the way of stability of value to be expected from bimetallism would be of the following description. It would not necessarily, nor even very probably, be reaped at once. The proximate effect of the reform might be to aggravate the evils complained of; supposing of course that the 'ratio' between gold and silver is fixed, not with the view of producing a temporary inflation, for instance at present at $15\frac{1}{2}$, but, as claimed by scientific bimetallists, with the view of securing stability under future disturbances, say the present market ratio. If that ratio is adopted, it is a quite possible event—the odds against it are much less than two to one—that when the next wave of monetary disturbance supervenes, the operation of bimetallism may be to aggravate, not to alleviate the monetary *malaise*. A generation, two generations, may pass away before the advantages of the reform begin to be realized. But let the reformers only persevere, and in the long run there will undoubtedly be realized, upon an average of centuries, a reduction of those deviations from the ideally best level of prices which from time to time are liable to occur. If once a century, with the uncorrected standard, men suffered an appreciation of 40 per cent., once a century, though not in the same years, with the corrected standard they might expect to suffer an appreciation of say only 38 per cent."

The reader who will take the trouble to follow Professor Edgeworth's argument will scarcely fail to be convinced that he has effectually demolished the "equilibration" idol of academic bimetallism.

Demand and the Ratio. In my notes kindly printed in the REVIEW I have contended that after '70 monetary supply tended to relatively cheapen gold and make silver dearer, while monetary demand tended to make gold dearer and silver cheaper. In its November comments the REVIEW raised no question as to my arguments regarding demand, but held that the marked change after '70 in the conditions of production was in the direction of cheapening silver.

In the November number in support of my contention I pointed out that "taking the stocks of 1850 as par," that date having been chosen as the approximate beginning of the two periods of abnormal production, gold increased 100% in the 25 years up to 1875,

and 78% in the 20 years following (or, roughly, at the average rate of 4% a year in both periods), while silver respectively increased only 21% and 45% (or 1% a year in the first period, and 2-½% in the second). While the increased production of silver after '70 of course in so far tended to cheapen it and must have lessened the extent to which gold through its still more largely increased production tended to be relatively cheapened, it is obvious that the tendency of the net increment (gold 4% less silver 2-½% a year) was to still relatively cheapen gold; but "supply" after '70 is the world's total available stock which between 1850 and 1895 increased 178% for gold and only 66% for silver, so all the more tended to make silver the dearer.

The REVIEW, however, in its comments held that the stocks of 1875 instead of the stocks of 1850 should be taken as the standard of comparison of the relative increments after '70; but on that basis the figures of respective increments, gold 39%, silver 37.1%, only show that the more nearly equal production during this period could at most have lessened, not overcome the previous tendency to cheapen gold, so could not have tended to relatively cheapen silver.

The REVIEW further argues from the relative ratio of increase in the two periods. For that, the two periods should be made of equal length, 25 years each, when at the rate existing to 1895, which will doubtless be exceeded for gold, the figures would be:

	Gold Stock.	Silver Stock.
1850-1875-----	100%	21%
1875-1900-----	48.75%	46.38%

That is to say, even though the ratios of increase show that gold's rate for the periods fell from 100 to 48.75 and silver's rate rose from 21 to 46.38, the relative production in the second period was for gold 48.75% on a doubled stock, and for silver only 46.38% on a stock only increased 21%, which must have made for the relative cheapening of gold.

So far as supply after '70 is concerned, then, it seems plain that the change in the direction of cheapening silver noted by the REVIEW was not sufficient to overcome the existing tendency to cheapen gold, so that the net tendency was, as I contended, "to relatively cheapen gold and make silver dearer."

The only great and sudden force sufficient to after '70 overcome this tendency and make gold relatively dearer that has been named by either side in this discussion, has been the greatly and suddenly

changed relative monetary demand. This contention admitted, it follows that the restoration of the former relative demand must restore the former relative value.

I take this opportunity to tender my sincere thanks for the courtesy shown me by the REVIEW in granting so much space for the expression of opinions not always in accordance with its own.

F. E. WOODRUFF.

Morristown, N. J., Nov. 29, 1897.

We feel that it would hardly be just to our readers to continue this discussion any longer, since it is quite evident that Mr. Woodruff uses terms in a different sense from that in which they are understood by the editors of the REVIEW and, we believe, by economists in general. By supply Mr. Woodruff evidently means the simple quantity taken from the mines, while we understand the amount offered *at a price*. Thus any discovery of new mines or any marked cheapening in the cost of producing silver would increase the supply and therefore tend to diminish the price, even though the amount actually taken from the mines might undergo no change. If we understand Mr. Woodruff aright, he argues that the increase in the quantity of silver compared with gold taken from the mines has not only not been sufficient to account for the fall in the price of silver, but would in itself have caused a fall in the price of gold, and infers from this that the fall must have been due to the action of the government, apparently not considering the potential supply or the cost of production. This method of reasoning we consider fallacious, but it would take too long to discuss all the elements that influence the real supply as above defined. Prof. Suess, the distinguished Austrian mineralogist, after weighing all the conditions, both geological and economic, which affect the divergence in the price of gold and silver, says, "This divergence lies in the nature of the metals themselves, and no statesman and no law can change the natural conditions from which this tendency proceeds." It is precisely because the natural conditions have tended since 1893 to cheapen silver that most bimetallicists rely upon the free coinage of silver to increase the monetary supply of the world. If, however, the natural conditions have tended to cheapen gold, then even international bimetallicism would have been powerless to increase the supply of money, since it is one of the axioms of the bimetallic theory that the cheaper metal always is

brought to the mint. If the mints had remained open to silver we should have had, according to this view, a continuation of the condition of things existing from 1850 to 1870 when the bimetallic nations were virtually on a gold basis. Mr. Woodruff's assumption with regard to the relative value of the metals would, if true, undermine the strongest argument in favor of bimetallism.

ED. YALE REVIEW.

The George Junior Republic. Various damaging criticisms having been passed on this unique enterprise, which has aroused so much interest in academic circles, its Board of Trustees lately requested certain gentlemen to visit the Republic and inquire afresh, and carefully, into its character and methods. These gentlemen were T. M. Osborne, of Auburn; Professors J. W. Jenks and B. I. Wheeler, of Cornell University; Professor J. R. Commons, of Syracuse University; Frederic Almy, Secretary of the Buffalo Charity Organization Society; and Professor W. F. Blackman, of Yale University. We quote a few sentences from the (unpublished) report of this committee: "Some of the evils criticized have been long apparent to the friends of the Republic; but the success of its plan, in spite of them and the probability of increasing its usefulness still more by gradually eliminating its faults while adhering to its essential methods and spirit, have led them to continue its support. . . . The committee recognize the undoubted fact, proved by repeated instances, that, even with the present most meagre appliances, the Republic does inculcate to a remarkable degree habits of thrift, of self-reliance, of honesty, of self-control, the habits most essential in character. At least one child has been sent from a reform school to the Republic as an incorrigible, who under its influence has been completely reformed. Others entering the Republic on the verge of physical and mental collapse from evil habits have within a year become strong and energetic and self-controlled through the compulsion of self-support and self-responsibility, aided, of course, by the affectionate sympathy and advice of Mr. George. . . . Several of us have visited many institutions for children, and we wish to testify that in no other institution have we witnessed so much of the spirit of mutual affection, of helpfulness, of unselfish regard for the welfare of others, of devotion to the institution, that ought to characterize the true family, as is constantly seen in

the Republic. . . . To us, the plan of cultivating self-reliance, thrift and self-control, enthusiastically and affectionately carried out as it is by Mr. George, seems pedagogically sound. The best teachers, the wisest parents, use it in part. For a reform school on a large scale, it is a new plan. It is as yet an experiment. It has beyond all question, in individual cases, produced remarkable results. May we venture to suggest that it may not be judged by the methods of established reform schools, but that final judgment be withheld until the results can be fully tested by experience."

The Scope and Method of the Twelfth Census is the subject of investigation by a committee of the American Economic Association, consisting of Professors Richmond Mayo-Smith, W. F. Willcox, Roland P. Falkner, D. R. Dewey, and Carroll D. Wright, the last of whom contributed so largely to whatever permanent value the last, the Eleventh Census, had. This committee is securing the coöperation of those interested in studying the faults and successes of the last and the most available and profitable methods for the next Census. It is to be hoped that they will stimulate public opinion upon this most important decennial government undertaking to demand a thoroughly scientific statistical investigation, well within the reach of the future head of the Eleventh Census, if he be properly selected.

Statistical Methods are manifold. One of the most intricate and for that reason least widely known is explained by Mr. G. Udny Yule in the *Journal of the Royal Statistical Society* for December last. The title of Mr. Yule's paper is "The Theory of Correlation." A chief inquiry in statistical studies is whether two variables are correlated or independent, i. e. whether a change in one variable is or is not usually accompanied by a change in the other; and in event of correlation whether they are directly or inversely correlated and to what degree. Thus the ages of brides and grooms are directly correlated. The older the bride, the older in general the groom, though not necessarily in the same degree. The earnings of laborers are inversely correlated with the degree of pauperism. From returns of thirty-eight unions it appears that a rise of a shilling in earnings corresponds to a fall of .5 in the percentage of pauperism. Statisticians usually trust the eye, which by simple inspection of a table or diagram discerns whether two variables move

together or apart. But this is a crude method which can never yield quantitative results and cannot indeed always be trusted to yield any. Thus Mr. Charles Booth failed to find any connection between pauperism and out-relief. But Mr. Yule, taking Mr. Booth's figures and treating them by the method of correlation, discovered a very marked direct correlation. The main idea of the method may be roughly described as follows: On a plane, which we shall suppose horizontal, lay off two axes for the two variables to be investigated, say ages of brides (reckoned east and west) and bridegrooms (reckoned north and south). A point whose coördinates are 26 and 35 represents marriages of bride aged 26 with groom aged 35. At this point erect a perpendicular to the plane which shall represent the *frequency* of this combination, *i. e.* the number of marriages in our statistical returns in which the ages of the bride and groom are 26 and 35 respectively. If such verticals are erected at every point on the plane, their tops will form a *frequency surface*. This surface will in general look like a sort of haycock, though elongated into a ridge instead of round. Its highest point is over the age combination at which the marriages are most frequent. The height tapers off in all directions as the remote age combinations are reached. If the surface be cut anywhere by a vertical plane running north and south, the section will be a *frequency curve* giving the distribution of frequency with which men of different ages marry women of a given age. Taking a series of such curves and connecting their top points (or more precisely their mean points), we have a line on the surface, the general direction of which across the plane gives the correlation of marriage ages, or rather we have one of two such lines, for, interchanging brides and grooms in the preceding construction, we have a line connecting the tops of the frequency curves which run east and west. The first line shows, taking brides of a *given* age, how much an increase of one year in that age affects the *average* age of grooms. The second line shows, taking grooms of a particular age, how much an increase of one year in that age affects the average age of brides. The process of deriving the two lines from a series of rough observations depends on the theory of least squares.

Mr. Yule's paper is the first attempt to set forth systematically and briefly the main results of many classical memoirs, of Bravais, Galton, Karl Pearson, Edgeworth and others. It deserves very careful study by all who wish to follow the trend of statistical science.

Among other valuable statements of modern statistical method may be noted: Galton's "Method of Percentiles," *Journal Royal Statistical Society*, June, 1896, p. 392; and Pareto's "Méthodes d'interpolation," *Journal de la Société de statistique de Paris*, November, 1897.

Gold in Circulation. In reply to a request from the Senate, Secretary Gage made a brief statement April 18, 1898, as to the method employed by the Treasury Department for estimating the amount of gold in circulation in the United States. The first calculation was made in 1872, by Director of the Mint Linderman. It was assumed that there was then no gold in active circulation except on the Pacific Coast, where the amount was supposed to be 20 millions. The quantity in State and private banks was put at 10 millions. Adding the gold in the Treasury and national banks, the total was brought to \$128,389,864.49. "The estimates from year to year since 1873 [1872?] have been arrived at by adding to the stock of coin at that date the annual coinage and amount of domestic coin imported, deducting the loss by recoinage of United States coin, the amount exported, and estimated as used in the industrial arts." The exports and imports are obtained from custom house statistics. The consumption in the arts is obtained from reports of private smelters and refiners and "censuses" of the Mint Bureau.

We have here an interesting illustration of that false accuracy with which statisticians too often cover up their rough estimates. Dr. Linderman's conjecture is carried out to the last cent and later estimates to the last dollar. The gold coin (including bullion in the Treasury) in the United States July 1, 1896, is given by the Director of the Mint (Rept. for 1896, p. 42) as \$599,597,964.

A sum cannot be more precise than the *least precise* of its parts. If the gold in California was estimated to the nearest ten millions, the sum into which it entered ought not to be expressed beyond the ten millions place. Dr. Linderman's estimates should, therefore, be stated as \$130,000,000, that is, there are only *two* "significant figures." As to the estimate for 1896, *one* significant figure (\$600,000,000) is the utmost that can be claimed. It must be remembered that *twenty-four* years had elapsed between the initial estimate and that for 1896. It is as though a man should look into a cistern when it was low and after estimating its contents seal it up and compute its contents a quarter of a century later by adding

an estimated inflow during that period and deducting an estimated outflow. He could not expect a very accurate result. Considering the well known difficulties of measuring imports and exports of money and the pure guess work involved in estimating the melting of coin, we must suppose a big error in the \$10,189,614 domestic gold coin said to be returned to the United States in 1895 (Mint Rept. for 1896, p. 31), and in the \$77,789,892 exported (*ibid.*, p. 32), and again in the million and a half supposed to be melted (*ibid.*, p. 54). The accumulated error since 1872 may well be 50 millions, if not double or triple that sum. As time goes on the accumulation of error continues. In another decade or two, estimates of the stock of gold based on this method will be worthless.

The government must soon resort to other and better methods such as Jevons'. The latest application of this method is by Mr. F. C. Harrison to the rupee circulation of India.

BOOK NOTICES.

History of the Commonwealth and Protectorate 1649-1660. By S. R. Gardiner. Vol. II, 1651-1654. Longmans, Green & Co., London, New York and Bombay, 1897—8vo, xxii, 503 pp.

Prof. Gardiner's second volume brings the history of the Protectorate down to August, 1654. Perhaps the most valuable new contribution in the volume is the diplomatic history of the Protectorate between 1651 and 1654, when Cromwell was engaged in his long drawn out negotiations with France and Spain. This history makes use of material before largely inaccessible and relating especially to the negotiations with Spain. The author has been able to supplement the transcripts of M. Guizot from the Archives of Simancas many years ago by complete transcripts of Barrière's dispatches to Condé owned by the late Duke of Aumâle.

The Protector's intrigues with the French Protestants up to the time of the fall of the city of Bordeaux, and the attempt to use the Ormée to originate a republican movement in France like that in England have, perhaps, more importance than the account given would indicate. Prof. Gardiner thinks it unfair to hold Cromwell to account for his agent's absurdity in the Constitution for a Republic and in the Manifesto published by Sexby. But Cromwell can hardly escape such responsibility. The Protector sent Sexby to do this work, and from a politician's standpoint his Constitution and Manifesto were well calculated to produce the desired effect. There is material on the relations of Cromwell to the City of Bordeaux that could have been used to advantage in this connection. The long drawn out negotiations with France are most clearly shown, but it does not appear how exceedingly important economic considerations were in determining the final outcome, and especially in turning the scale in 1654-5 from a close alliance to a mere commercial treaty. The religious element in this diplomatic struggle is much more clearly defined.

From an economic and religious standpoint the West Indies Expedition was especially important. It was a turning point in English history in one important sense, for it began that great extension of English power that has been so prominent a phenomenon in the 18th and 19th centuries. We should have liked to see traced out the religious and economic influences that led to

this expedition and what part New England men had in these influences. But this discussion may have been left to the next volume. Other features of Cromwell's colonial policy, while touched upon incidentally, are not as carefully examined as we might expect, nor is the economic significance of the Navigation Act dwelt upon as its importance deserves. However, the change from religious interests as the basis of governmental action to interests that are political and national is nowhere, perhaps, so clearly shown as here.

Prof. Gardiner, like others of his school, passes over with indifference factors that have rightly come to be regarded as very important in unravelling trains of policy. The economic side of the Protectorate is not adequately shown us. The mercantile system and its relations to the Protectorate and Commonwealth do not receive a critical examination. The relation of Cromwell to the mercantile system of the 17th century is a matter of great importance, not only because of the Protectorate itself but also because it established England's relation to, and laid the foundation of her supremacy in, the mercantile system to the end of the 18th century, and led to a train of events of the greatest significance.

Prof. Gardiner's estimate of Cromwell seems in the main just and high, with the exception that he is inclined to regard his work as transitory because the outward signs of it early passed away. This is hardly the view that suggests itself to American readers.

This volume, like its predecessor, exemplifies the rare scholarship and admirable poise of judgment of the author and is a most valuable addition to English historical writing.

FRANK STRONG.

Yale University.

Anarchism; a Criticism and History of the Anarchist Theory. By E. V. Zenker. New York, G. P. Putnam's Sons, 1897—16mo, xiii, 323 pp.

This work is a translation from the German, though there is no intimation of that fact anywhere in the volume itself, save casually in a foot-note on p. 175. The original was published in Jena two years ago; it deserved and received a welcome among German scholars, as being the first effort ever made in book form to give an adequate, impartial, historical comparative and critical account of the anarchist theory. We are glad that it has now been made accessible to English readers, though we cannot approve the appar-

ent attempt of the publishers to conceal the fact that it is a translation.

A hundred pages are devoted to Proudhon, the "father of anarchism," the "proletarian in wooden sabots and blouse"; and a third as many to Casper Schmidt ("Max Stirner"), "that plain German schoolmaster who would people society with mere sons of Prometheus, while he himself totters starving to the grave." These are the founders and apostles of the doctrine. The author then gives account of the "modern anarchists"—Bakunin, "the commercial traveler of eternal revolution in a magnificent pose"; Netschajew, "the apostle and saint of Nihilist poesy"; Krapotkine, "the learned prince"; Elisée Reclus, "the earnest savant, full of the purest love and devotion for mankind," "the St. John of the anarchists"; Grave, "every inch the man of action"; Saurin; Louise Michel, "the caricature of the social revolutionist in petticoats"; the "repellant" Dühring; von Egidy, with his "spirit of Prussian militarism and squiredom"; John Henry Mackay, "honest and upright," and like Caliero a millionaire; Most, "fateful and gloomy"; and so on. The distinctions which many overlook are carefully drawn between philosophical anarchism and the "propaganda of action"; between the early, middle and later periods in the development of the doctrine; and between its individualistic, collectivist and communistic forms.

The author holds that the theory "contradicts human nature and the facts of life"; that even if put in practice it would be "very harmless—leaving everything as before, merely changing the present compulsory system into a voluntary one"; that its mission is to assist in the overthrow of socialism; and that it "cannot be conquered by force and injustice, but only by justice and freedom."

It is a pity that so good a book should not be better. It swarms with typographical errors, specially in the spelling of German words. It gives the titles of works, now in the original, now in translation, as it may chance; and its critical and constructive portions are by no means equal to those which are historical and expository.

W. F. B.

The War of Greek Independence, 1821 to 1833. By W. Alison Phillips. With map. New York, Charles Scribner's Sons, 1897—12mo, pp. xv + 428.

This volume is a convenient and readable account, making no claim to originality, of the Greek revolt and the establishment of the present kingdom. The author clearly tries to be impartial, and has gone to the best secondary sources, and to the primary sources for diplomatic questions. He does not, however, mention S. Trikoupis's History of the Greek Revolution, in modern Greek; so able a work from the Greek side, by an actor in the events described, cannot be overlooked without loss. Mr. Phillips is certainly not unduly Philhellenic; he dwells with rather more emphasis on the various Greek acts of savagery than on those of the Turks. Nevertheless, writing during the recent war, he points out clearly how unwise and unfortunate it was, for European interests as well as Greek, to make the young kingdom so small and weak by excluding from it Crete and the other Greek islands that Turkey still holds.

T. D. GOODELL.

Yale University.

The Bargain Theory of Wages. By John Davidson, M.A., D.Phil. New York, Putnam's, 1898—8vo, 319 pp.

This is an interesting book written in an easy and attractive style. It was planned as a text-book for advanced students, but serves equally well the purposes of the general reader. The author treats in succession the subsistence theory, the wages fund theory and the productivity-of-labor theory. He then tries to fit them, or such parts of them as can be fitted, into a "bargain theory." The Ricardian idea that wages were fixed at the level of subsistence looked only at the laborer's side of the bargain. The productivity theory looked only at the employer's side. The wages fund theory was the only one of the three primitive theories which treated of both the demand and supply of labor. But this theory was too simple and too crude. The "bargain theory" is in brief that the laborer has a lower limit by which he is prepared to stand and the employer an upper limit, and that wages are fixed between the two according to the relative strength of the two parties as bargainers.

In the preliminary chapters, commenting on the three original theories, the author follows the Baconian method with true scientific instinct. Facts are cited in favor of the subsistence theory, such as

that parish allowances decreased wages, charity becoming part pay to the laborer and relieving the employer of the necessity of the entire support of his workmen; and that city wages are higher than country. Facts against the theory are that agricultural wages are higher in summer than in winter, while cost of living is higher in winter than in summer. The aid of statistics is frequently invoked, especially in treating the subject of the mobility of labor. Many of the author's figures and illustrations are drawn from Canada.

The constructive part of the work is less valuable than the critical. As a discussion of the various concrete circumstances which strengthen or weaken the bargainers, it is admirable. Trade unions, knowledge, standard of living, custom, mobility of trade or country, are severally discussed. But, as it seems to us, we need to go much deeper than this to get anything which may truly be called a theory of wages. "Supply and demand" lie quite on the surface: we need to know the factors on which they depend and the *mode of their dependence*.

Even as an expression of the outcome of economic forces the author's statement of supply and demand is inadequate. An employer does not have a single upper limit; he has a sliding scale of limits, a "demand schedule" or curve. The same holds true of the laborer's side, the "supply." The nature of the laborer's schedule in particular needs investigation. The author points out that labor is a unique commodity, but he does not follow out its uniqueness. It is doubtless a fact that the supply of labor of many kinds increases with a decrease of wages. The less the laborer is paid the longer he must work to make a living, or the more inclined is he to put his wife and children on the labor market. This peculiarity of the "commodity labor" needed more attention than Professor Davidson has given it.

There is throughout the book a lack of that precision which we are gradually requiring in economic treatises. In some cases crude confusions come to light. Those accustomed to regard capital as a stock at an *instant* of time and income as a flow through a *period* of time cannot pass, on the same page, from "wages . . . are paid out of . . . income rather than . . . capital" (p. 56) to "the source of wages is the stock or the fund of such consumption goods" (*ibid*), or make sense out of "the income of society *at any given moment*, may be taken as an approximately fixed amount" (p. 63; the italics are ours). The author, like too many economists, appears to believe that mathematics do not apply

to variable quantities: "The mathematical method . . . is not quite applicable, because we are dealing not with rigid quantities but with human forces" (p. 110).

Very probably the author had no intention of writing a final and rigorous treatise on wages. As a critical and historical essay his book is full of interest, instruction, and suggestion. I. F.

Yale University.

Thirty Years of American Finance: a Short Financial History of the Government and People of the United States since the Civil War, 1865-1896. By Alexander Dana Noyes. New York and London, G. P. Putnam's Sons, 1898—8vo, xv, 277.

Many historians and economists would hesitate to write the financial history of the past thirty years. The immense difficulty of the task, in view of the variety of topics to be covered, their complicated inter-relation, and the vast amount of material to be collected, arranged and digested, has driven writers from the study of this to that of earlier periods. Mr. Noyes is the first to undertake the task, and has succeeded most admirably. In a clear and attractive way he introduces the general reader to the important financial events of the past thirty years. These are grouped about the general subject of currency debasement, and incidentally about the subject of surplus and deficit financiering. Mr. Noyes possesses in a high degree the necessary qualifications for recounting and analysing the varied financial experiences of the years since the Civil War. As Financial Editor of the *New York Evening Post*, he is trained to carefully follow and observe the daily movements of the various important markets, and to analyse their meaning, particularly in the money and in the exchange markets. To this excellent training he adds breadth of view and comprehensiveness of treatment.

There is a weird fascination in the story of the attempts at currency debasement since the war: the hopeful movement under Secretary McCulloch to contract the currency and its defeat as the result of the hard times of 1866 and 1867; the campaign of 1868, in which the Republicans were driven, as in 1896, by the attitude of the Democratic party to champion sound currency; their victory and the consequent passage of the Public Credit Act of 1869; the culmination of the inflation movement in 1873 and 1874, and the passage and veto by President Grant of the inflation bill of the latter year; the defeat of the Republicans in the Congressional elec-

tion of 1874, and their consequent passage of the Resumption Act; the preparation for and carrying out of the resumption of specie payments; and at the same time, the adoption of a permanent paper money policy in 1878. Then the scene changes, and silver begins its rôle in the finances and politics of the country. From 1876 on, the inflationists change their allegiance from the greenback to the silver dollar. The latter is remonetized in 1878, and futile attempts are made to force it into circulation. Then follows a recital of the familiar story of our recent experience with the white metal: Secretary Windom's fantastic plan of 1889; the Sherman Act of 1890, its share in the upheaval of the following years, and its repeal three years later.

The question of the surplus revenue is taken up with the year 1885. This is a pity, for this treatment avoids the highly important revenue experiences immediately after the war, which have heretofore received too scant attention; moreover, opportunity is thereby lost to analyse the changes in our federal revenue system during the past generation, which are of importance in the recent difficulties, and will have their distinct bearing on future developments in our revenue system. The changes in our revenue system, in particular in our customs revenue, suggest the corresponding changes in our foreign trade and in our tariff legislation. The former might have been more fully treated, though the author is eminently successful in examining our and foreign crop statistics, our exports and their important bearing, for instance, on resumption in 1879 and on the difficulties since 1890. These latter experiences fill about half the volume, which goes into great details in analysing the deficit financiering of the past six years, the increase of Federal expenses and the decrease of revenue under the various tariff acts, the critical times of 1893, and the subsequent bond issues. These last are particularly well discussed by Mr. Noyes.

A few of the striking lines of thought in the book deserve particular notice. The criticism of the official acts of the two Secretaries of the Treasury, Mr. Sherman and Mr. Carlisle, are, on the whole, eminently just and fair. The lucky combination of abundant American with deficient foreign crops, which, on several occasions, has removed or at least postponed grave financial difficulties, is fully shown. Special attention is called to the government's policy of supplying the general demand for notes of small denominations with \$1, \$2 and \$5 silver certificates. This movement, beginning in 1886, has completely changed the character of our circulating

medium, substituting for banknotes and treasury notes a form of currency having all the disadvantages of the latter with none of its advantages, if there be any, but containing additional elements of grave danger for the future. We wish there were more substantial ground for the hope expressed by the author in his closing paragraphs, that this year may be the close of an epoch in our financial history, and that the financial problems of the future will not be the old ones we have trifled with so long.

J. C. S.

Yale University.

Essays on the Civil War and Reconstruction, and Related Topics. By William Archibald Dunning, Ph.D., Professor of History in Columbia University. New York, The Macmillan Co., 1898—8vo, viii, 376 pp.

This volume is a collection of the Essays of Professor Dunning on the subjects mentioned. Only one of these essays is new—that on “The Process of Reconstruction.” The others have been printed at various times in the *Political Science Quarterly*, the *YALE REVIEW* and the “Papers of the American Historical Association.” However, in the case of those already published, there has been considerable revision and alteration. The new contribution in this volume gives, perhaps, the best obtainable account of the actual process of reconstruction, although it has too little coloring to show the real political and social conditions in the South during those trying years. The fact is very clearly brought out that negro suffrage was the central idea under the congressional plan and that military government was merely incidental to reconstruction proper. It is a question whether it is clearly enough shown how very remarkable were the powers granted to the military commanders and what was the use sometimes made of their powers to further partisan political ends. But it must be conceded that they had a very difficult task to perform, and, as we are shown in this essay, the military commanders often “did stalwart service for the cause of conservatism and hence for the interests of the class by whom they were abused.” The inexorable movement of reconstruction under the authority of two-thirds of Congress is well brought out. Reconstruction as a process was vigorous and successful. But the wisdom of the end aimed at and of the means used is not so clear. Professor Dunning considers the first available method of reconstruction under the Johnson government “grotesquely impossible,” “however defensible as to

social and economic readjustment in the South itself, etc." It is a grave question whether such an assertion is borne out by the facts. There were then, according to Professor Dunning, only two methods left, one through military government, the other through negro suffrage. He asserts in this essay that the second method was resorted to because of the English antipathy to military rule. But certainly the second method was not used exclusively, for military power was present in the South until 1876, so that the method pursued was a mixture of military domination and negro suffrage. The negro suffrage part of the method, as the writer says, was certainly a failure, and it is a question whether the other part of the mixed method was not equally a failure. In other words, it is a question whether practical reconstruction did not take place after 1876, after the army was entirely withdrawn and the South left to reconstruct itself in a fashion nearer that of the Johnson plan than any other. The book is published by the Macmillan Company, and is gotten up in attractive style.

FRANK STRONG.

Yale University.

Die sociale Frage im Lichte der Philosophie; Vorlesungen über Socialphilosophie und ihre Geschichte. Von Dr. Ludwig Stein, ord. Professor der Philosophie an der Universität Bern. Stuttgart, Verlag von Ferdinand Enke, 1897—8vo, xx, 791 pp.

This work, of nearly 800 pages, illustrates at once the tireless industry of the German scholar, and the vivacity and charm of the French essayist. It displays a familiarity with sociological literature almost incredible in so young a writer as Professor Stein, especially in view of the fact that he has presumably devoted himself hitherto chiefly to philosophical studies, as is evinced by the considerable list of his publications in that field, and by his editorship of the *Archiv für Geschichte der Philosophie*. Perhaps we cannot better illustrate this great breadth of information than by citing some of the names of American authors which are found in the work: Abbott, Bowne, Ely, Emerson, George, Giddings, Gilman, Gronlund, James ("dem geistvollsten Psychologen der Gegenwart"), Kennan, Morgan, Morris, Noyes, Small and Vincent, Schurman, Sumner, Tucker. The account of Russian writers which was paraphrased in the *YALE REVIEW* for August, 1897, is another case in point. Nowhere else, so far as we are aware, can one find the sociological literature of the whole western world, up

to the beginning of last year, classified and often characterized, so well as in this volume. And it does not contain a dull or obscure paragraph.

As to the fundamental purpose and contention of the work, that is sufficiently indicated in its title; sociology is regarded rather as a philosophy than as a science, and its claim to this rank is defended against such strictures as those of Dilthey. It is treated from the psychogenetic and phylogenetic point of view. The work is divided into three sections. The first traces the transition from a pre-social to the social stage; the second sets forth a critical history of social philosophy, from its beginnings with the Greeks to the present; the third contains the outlines of a sociological system (static and dynamic), and a discussion of the more significant proposals for social reform which have been urged. The treatment throughout is dominated by optimism (as was to be expected perhaps in so appreciative a student of Leibnitz); by the idea of "immanent teleology"; by those social and political sympathies with which the air of Switzerland seems charged; and by a consequent faith—albeit in places somewhat dubious—in the excellence and permanence of the present social order. We have noted a number of typographical and other minor errors: thus Noyes is spelled Nayes; Gilman, Gillman; Schurman, Schurmann; Gronland, Grunland; E. V. Zenker appears as E. N. Zenker, and the title of his book on Anarchism is incorrectly given. B. R. Tucker is said to be the editor of the journal "Liberty, not the daughter, but the mother of order."

W. F. B.

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THE
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COMMENT.

Imperialism, True and False; Administrative Problems of an Imperial Policy; State Railroad Purchase in Switzerland.

THE terms of peace may be agreed upon between Spain and the United States while the present number of the YALE REVIEW is passing through the press. To discuss the possibilities of the treaty in detail would therefore be inopportune. Yet the general questions of foreign policy, so suddenly brought into prominence by the war, cannot be considered as settled by a single treaty, and for some time to come we must expect that the colonial question will vie in importance with, and indeed powerfully influence, the questions of domestic policy which have hitherto engrossed our attention. The importance of the problem thus presented may be seen from the manner in which the reconcentrados, for whose benefit the war was ostensibly waged, have apparently dropped from the public mind, while empire is on the lips of every one.

The question is indeed of the first magnitude, and before committing ourselves to what may be irrevocable, we should carefully consider what we mean by empire. The term is most incongruous in a democratic country. As originally used, *imperium* meant military despotism, and it was the rule of the commander of the army, to which Rome had to submit when the Republic decayed and self-government had become a lost art. It meant, primarily, the substitution of an autocracy for a republic. It also meant a large area governed, and often grossly misgoverned, for the advantage of the *imperator* and of

the ruling city. Rome, to be sure, gave the world peace and law, but she charged an exorbitant price for her benefits. So great, however, was the power of the Roman name that conquering monarchs from the time of Charles the Great down to Napoleon have borrowed the title "Imperator" in order to lend luster to their own achievements.

Quite different from this military despotism is the vast conglomeration of commonwealths known as the British Empire. It is significant that the first sovereign to formally adopt the imperial title should be a woman, and perhaps the most peace-loving in the series of British sovereigns. The modern British Empire differs from the Roman in its constitutional form, in its economic life, and in its process of growth. The Romans tried to introduce something like a uniform system of administration throughout their dominions. The British Empire is remarkable for the heterogeneity of its constitutional forms. Almost all types of government, from an absolute, but enlightened, despotism to the freest democracy, are found somewhere under her flag. Economically, Rome tried to live from the plunder of her provinces. England has pursued, at least during the present century, a system of almost perfect freedom and non-interference, allowing the greatest latitude to the initiative and private enterprise of all of her subjects. Rome made her conquests first and allowed commerce to follow; in the growth of the British Empire, the reverse has been the general, if not universal rule. Commerce has sprung up, and political domination has followed in order to protect that commerce. There has been no system or theory in this growth, but English statesmen have simply felt their way from one necessity to another. It is because the modern British Empire is based upon commercial principles and recognizes the maxim, *do ut des*, that it has seen the necessity of giving its possessions something in return for what it gets, and it has given them, in the fullest measure, good government. It has also discovered that if it would find a market for its own goods, it must admit in payment the goods of the rest of the world. This policy, often stigmatized as a selfish one, has in fact been of inestimable value to the world at large, because it has been based upon an enlightened, not a

narrow view of self-interest. So great, indeed, have been the blessings of British dominion that many question whether the colonies are not a loss rather than a profit to the mother country.

There are thus two widely divergent types of imperialism, and when we hear the term used it becomes us to inquire which of these two meanings is in the mind of the imperialist. There are many who unconsciously have before them the Roman idea. Not that they would establish military despotism under one man, but that they would use distant possessions for the benefit of the United States, without realizing what must be given in return. To this class belong the spoilsmen, who want colonies for the sake of the offices. To this class belong, also, those who expect to get especial privileges in the way of trade from colonial possessions. Somewhat curiously, this class of people find powerful allies in those who advocate empire from a diametrically opposite motive. We are now told by many that we must extend our sway, not for our own benefit, but for the benefit of the governed; that we have no right to withhold the privileges of American freedom from nations on whose soil the American flag has once been raised. This argument presents a very insidious temptation to our people at the present time, by appealing to their large hearts rather than to their hard heads. For, once accept the theory that we must expand our dominion, either for the sake of the spoils or for the sake of philanthropy, and there is practically no limit to the responsibility which we may have to assume.

Mr. Lecky was quite right when he said, "For my own part, I confess that I distrust greatly these explosions of military benevolence. They always begin by killing a great many men. They usually end in ways that are not those of a disinterested philanthropy." Though we believe that the sober sense of the people will repudiate the claims both of the spoilsmen and of the theoretical philanthropists, there is some danger in the union of two such influences.

If we would build up an American empire, we must not make conquests for the sake of the conquest. We must expand our territory and our dominions only as rapidly as our commerce

and industries absolutely demand it. We must avoid expansion for the sake of a political theory. Above all we must recognize the gravity of the commercial complications which inevitably arise from the acquisition of territory. The enormous, almost startling, increase in our exports of manufactured products during the past fiscal year shows that what we need most of all is an open market. This can best be secured by repudiating the doctrine of expansion by acquisition after the Roman type, and insisting simply upon freedom of intercourse, a freedom which the energy and intelligence of our people can be trusted to take advantage of, if divorced from governmental restraint.

This kind of empire is an empire of peace, not of contention, and it does not force us to repudiate, as many of our imperialists are repudiating, the wise counsels of Washington. Indeed, this policy seems almost foreshadowed by him, when he says, in his Farewell Address:—"The great rule of conduct for us, in regard to foreign nations, is, in extending our commercial relations, to have with them as little *political* connection as possible Taking care always to keep ourselves, by suitable establishments, on a respectably defensive posture, we may safely trust to temporary alliances for extraordinary emergencies. Harmony, liberal intercourse with all nations, are recommended by policy, humanity, and interest. But even our commercial policy should hold an equal and impartial hand:—neither seeking nor granting exclusive favors or preferences;—consulting a natural course of things;—diffusing and diversifying by gentle means the streams of commerce, but forcing nothing."

True American Imperialism consists in the empire of trade, coupled with fair dealing, justice, and freedom, not in the empire of conquest.

Entirely apart from these general considerations, the purely administrative difficulties of the policy advocated by our imperialists would suffice to make a less sanguine people pause, before embarking upon so radical a change. The splendid

efficiency of our navy and the wonderful capacity for self-government shown in the history of the settlement and organization into States of our western territory make all problems of occupation and development of new lands seem easy to us. That we should ultimately achieve success in the government of Asiatic colonies may readily be conceded, but that it can be secured without the humiliation of temporary failure is hardly possible. Our present success has been won by a trained arm of the state thoroughly equipped for its work, and dealing with familiar material,—modern engines of destruction. To govern an Asiatic colony successfully will require an equally disciplined arm of the state,—trained civil servants who will know the people they have to deal with. To govern the Philippines without such a body as the English or Dutch colonial civil service will be like trying to destroy the Spanish fleet with auxiliary cruisers and naval militia. The English and Dutch have governed Asiatics well, having learned how to do it by a costly experience, as long as our own in occupying and planting this continent with self-governing communities. The English in India and the Dutch in Java have succeeded by building up highly efficient benevolent despotisms. No Asiatic colony has ever been, or can be for generations yet, well governed except by an enlightened despotism. We could establish despotic rule at once, but to make it enlightened will require more than good intentions. We know nothing about our problem. Compare the absolute dearth of our knowledge of these Asiatic islands with the vast mass of accumulated experience and scientific observation which little Holland has at her disposal. The standard bibliography of the literature relating to the Dutch colonies,—Hooykaas: "Reportorium op de Koloniale Litteratur," covering the years 1593–1865, contains 21,373 titles. The part on government, finance, etc., contains some 5,500 titles. The supplementary volume covering the years 1866–1893 contains 430 pages of two columns each. Before we can deal satisfactorily with such a problem as the government of the Philippines, we must have acquired experience, accumulated special knowledge, and trained a permanent civil service till it has the *esprit de corps* of a military body. All these indispensable requisites

for success in this new undertaking the ardent advocates of an imperial policy would unite in denouncing as un-American. The new policy thus requires the American people to take up a kind of work of which it has no knowledge from experience, and which can be successfully performed only by a radical departure from all its theories of government and most cherished political convictions.

On the fifteenth of October, 1897, the Federal Assembly, by a very large majority, passed a law arranging for state purchase of all the main Swiss railroads. On the twentieth of February of the present year this law was, under the operation of the *referendum*, submitted to popular vote and ratified by 386,000 votes against 182,000. Its passage was generally expected; but the partisans of the measure were themselves surprised at the enormous popular majority in its favor. The mountain cantons, where no important railroads exist, were the only ones which gave decided majorities against the measure. In French Switzerland the vote was pretty evenly divided. The industrial parts of German Switzerland, which contain the bulk of the country's population, showed an overwhelming sentiment in favor of state purchase;—about four to one in Bern and Basel, five to one in Zurich, and as high as eight to one in Glarus and Thurgau.

The circumstances of Switzerland with its republican institutions, its private corporations to a considerable degree foreign-owned, its state charters and its federal control, are in so many respects like those of the United States as to make this result a subject of special interest in this country.

Its causes were political rather than commercial. Perhaps the most striking thing about the whole discussion is the small part played by economic reasoning as a factor in the contest. The advocates of the measure of course found economic pretexts on which to support their arguments; but they did not take them seriously, and were ready to let them drop when they had a chance. They promised that rates would be reduced; but the project finally adopted contains no provision looking

to such reduction, and is based on financial data which will render any lowering of rates most improbable—particularly in view of the fact that the railroad labor vote in support of the measure was secured by promises of better wages and shorter hours. They had much to say of the administrative economy which would result from the substitution of a single state system for the separate offices of the several companies; but when the cities where the separate offices were situated looked askance on a measure which would deprive them of this importance, the pretense of economy was cast aside for the sake of gaining votes, and arrangements were made for six general offices instead of five as at present. It was on grounds of political theory that the question was decided. The socialists voted for the measure because they thought the state should take the place of all private capital; the radicals voted for it because they thought the state should take the place of that particular form of private capital. The two parties together were strong enough to constitute a majority; a division of opinion among the members of other parties made that majority overwhelming.

The charter conditions are such that, for four of the five main systems, state purchase will go into effect in 1903; for the St. Gothard it will come in 1909. It will thus be at least five years before the economic difficulties of the project, which have been so far ignored in the discussion, make themselves manifest in practice. First will come the financial ones. The plan as adopted contemplates purchasing the railroads at a very cheap rate; and a great deal of the popularity of the plan depends upon this compulsory cheapness, by which the state can drive a hard bargain with the capitalists. The charters of the Swiss railroads provide that, in compulsory purchase, the state must pay the company, on the one hand, not less than twenty-five times the average net income for the fifteen years preceding the date of purchase; and on the other hand, that the state must not pay less than the actual cost incurred in building the road. The companies thus had a double safeguard; and when state purchase was proposed in 1883, it was rejected as too expensive. But since that time, the authorities have been busy making laws as to railroad accounts which define "net

income" and "actual cost" in a manner most unfavorable to the companies; while they intend to make the most of the clause which provides that the property must be delivered to the state in "a perfectly satisfactory condition." They thus propose to buy the stock of four of the companies at about two-thirds of its market value prior to this agitation for state ownership; they calculate to raise money for the purchase by the issue of 3½ per cent. bonds; and they expect in this way so to reduce fixed charges as to make up for the burden involved in the assumption of the relatively unprofitable St. Gothard road.

It is needless to say that expropriation on these terms will be contested in the courts. If the courts decide against the government, the operation will be much more costly than is expected. If they decide in favor of the government, we do not think that money for the transaction can be borrowed at 3½ per cent. The decision will create a prejudice among foreign investors, and the disposable home capital in Switzerland is not very large. The financial burdens are thus, in any event, likely to be heavier than the estimate.

Meantime, industrial difficulties will make themselves felt. If the financial burdens continue, the expectations of higher wages and lower rates will be difficult to fulfill. In the efforts of the authorities to satisfy the immediate demands of all parties it is not unlikely that they will repeat the experience of northern Italy twenty years ago, and economize on maintenance accounts until both track and rolling stock are quite inadequate; nor is it altogether unlikely that in Switzerland, as in Italy, this inadequacy of government management will produce a reaction which may result in establishing the private companies more firmly than ever.

THE PRESENT STATUS OF COTTON AND COTTON
MANUFACTURING IN THE UNITED STATES. 1899

I HAVE been requested by the Editors of the YALE REVIEW to prepare an article on the existing conditions of the cotton manufacture. I could only agree to put into a little different form the substance of several treatises which I have already published. I shall also be obliged to speak in the first person. I may do this without assumption, as I believe my treatise on "Cheap Cotton by Free Labor," published in 1861, was the first one in which the system of slave labor was dealt with purely from the economic standpoint and utterly condemned.

I may venture to suggest to the students of Yale University, many of whom will hereafter be occupied in what is called practical life, that it will be greatly to their advantage and possibly to their profit if they will investigate each material subject with which they may be called upon to deal on every line which is open to them. When I first became occupied in the conversion of the cotton fibre into fabrics, I sought to trace the history of the cotton fibre from its origin in prehistoric times down to the present. I found that as I held one end of the strand of twisted cotton, the other had been held by some prehistoric woman in far-away India, who gathering the fibre of cotton from the boll, twisted it in her fingers and doubling the strand by holding it with the teeth, may have made the first strong cord. As I followed this strand down through the ages I found in its convolutions the whole of human history, much of it yet unwritten for the reason that the true history of commerce and its influence upon the present condition of the world yet remains to be written. Witness the fact that the wars of religion, the wars of dynasties, the wars of classes and the wars of creeds have merged into wars or threats of war for the control of commerce.

There are some persons, even Senators of the United States, who regard international commerce as a state of passive war,

looking upon the import of any goods which could under any circumstances be made in this country, even at a higher cost than they can be made for elsewhere, as an attack upon domestic industry which must be repelled by the force of what has been called protection with incidental revenue. This one-sided and superficial view is held by those who give no regard to the fact that commerce is an exchange of products for mutual benefit, and that when through the export of what we do not need we obtain goods at a lessened cost which we do need, both nations are benefited. Yet through the force of circumstances rather than by the exercise of any reasoning power, this mediæval conception of commerce as a condition of industrial war is intellectually dead.

There are many signs that the effort to establish what is called "protection with incidental revenue" has at length drawn public attention to the fallacy of the system of privation which has so long been masked under this phrase. The home market of this country has been extended by sales of goods for export at the rate of one hundred million dollars worth per month for the past year. These goods consist not only of the crude products of the field, the mine and the forest, but of the finished products of the workshop and the factory, from which the highest rates of wages earned in this or any other country are derived. The foreign markets in which these goods are consumed are mainly in the machine-using or manufacturing states of Europe, where wages are lower than our own, but much higher than in other countries or continents. The United Kingdom of Great Britain and Ireland with the British Colonies buy in our home market at our seaports more than sixty per cent. of the excess of our farms and of our workshops. France and Germany, high protection states, with Belgium and Holland, whose tariff taxes are on a revenue basis, take more than twenty per cent., while the non-machine-using nations are able to buy from us less than twenty per cent. of what we sell. Yet these non-machine-using nations of Asia, Africa, South America and Oceanica are among the largest buyers of the manufactures of Europe, while we complain of our limited
t. among them. We have been scared by the phantom

of "pauper labor," failing until now to realize that low-priced or pauper labor is very costly and that high wages earned by intelligent and skilled workmen are the complement of low cost of production. As this economic principle becomes a part of the common knowledge or common sense of the community, the dread of pauper labor becomes humiliating. So long as the domestic consumption of our own country extended so rapidly that we had but little to spare, the delusion prevailed among ourselves which governed the English mind until 1842, when under the lead of Sir Robert Peel she opened the door to the trade of the world and made her ports the centers of the World's great commerce. It has not been difficult to mislead the community by men themselves misled, who like the Senators from Massachusetts regard international commerce as a war on domestic industry.

But under existing conditions it will soon be impossible for men, even of great ability in the legal or other professions, to maintain a mere party policy of protection by which the country is deprived of its rightful position in the commerce of nations in which we are now entitled to the paramount position. The unfortunate war in which we are now engaged has brought purely revenue taxes into force, which added to the previous revenue taxes on liquors, tobacco and sugar will suffice to meet all the normal expenditures in time of peace. These taxes will stay because they are consistent with the simple principle of right, namely: all taxes that the people pay the government should receive. The tariff taxes will be abated which the people now pay but which the government does not receive under the policy of protection with incidental revenue. The country is now waiting for the true economic leader who will surmount partizan dictation and do the great work for the country which Sir Robert Peel did for England. When this is done the commercial re-union of the English-speaking people will be accomplished.

Peace, order, industry and free commerce will then be assured, if for no other reason, yet because the debt and army-burdened states of continental Europe will be wholly incapable of any extensive competition in the arts of peace.

When the materials and machinery of foreign origin which are necessary in the processes of our domestic industry are then freed from obstructive taxation, there are no products more likely to find a rapidly increasing market in our seaports for the supply of foreign consumers, especially in South and Central America, Asia, Africa and Oceanica, than the textile manufactures of the United States, especially of cotton fabrics.

The fabrics which can be most surely produced in Southern cotton factories are especially adapted to the export trade in heavy and medium goods.

One may remark by the way that in the progress of humanity commerce will surely suppress war. Let the respective principles which govern the art of commerce and the art of war be contrasted. In the former the fundamental principles which in the end control the relations of men are mutual service, mutual benefit, mutual trust, mutual credit. The men who surely find their places in the control of large enterprises in banking and in commerce, must be governed by motives of integrity and must conduct their work honestly in order that they may retain power and influence. Even rogues or unconvicted felons who have for a time secured the control of railways, using the stock and bonds for purposes of fraud, have yet been compelled to develop the railway service itself on the principle of mutual benefit to those whose products are carried thereon. In a community where men cannot trust each other there is little credit and can be very little commerce. Men must be almost unconsciously honest, or I might say unconscientiously honest, in order to retain a leading position in commerce for any long period. On the other hand, while the conduct of war may develop men of the highest character; and must develop courage, resource and ability in many directions, yet the art of war compels its masters to deceive, to spy, to ambush, to resort to every mean device, to mislead and over-reach the opponent while using every art which is condemned in morals for the purpose of striking him in the back. A little progress has been made since prisoners were slaughtered, first by enslaving and last by sending conscript boys home to their mothers the expense of the conquering state. Private rapine and

plunder are forbidden upon the land but are still lawful upon the sea. The horrors of war are alleviated by the Red Cross agency. But war stands in the way of commerce, and since commerce is the superior power and is the force by which even the horrors of war have been in part abated in these days of the rapid recognition of right principles of action, it may not be many generations before the moral and constructive force of commerce and the interdependence of nations will suppress the immoral and destructive force of war and rapine.

If the student desires to find out more of what is twisted into the strand of a cotton thread as it has been spun by the fates down through the ages, he will find therein the lesson which I have attempted to give in the previous paragraph and much more, provided he has the right type of imagination. Imagination, not fancy, but the power of forecast is the prime factor in every great business enterprise and is essential in the conduct of commerce on any large scale.

I first sought the reason why it was that although cotton had been known and used throughout all recorded ages, and although cotton had with feathers formed the materials for clothing of the people of Mexico when Cortes first appeared, yet within a single century the cotton of the United States had assumed such a dominant position as to have become in the conception of the Southern growers "a king"; their misconception of the importance of Southern cotton leading them to the fatal effort to break up the Union.

When I entered upon this study of the subject of daily work I desired to learn:

First. How cotton grows.

Second. Why our cotton States had become the main source of its production.

Third. Why cotton can be spun directly from the field, even with the fingers, into a strong thread.

This investigation led to a study of the physical geography and geology of the Southern States, and of the chemistry of the soil on which cotton grows.

I learned that during the glacial era the ice cap extended to and stopped near the mouth of the Delaware River. I learned

that the great Laurentian Chain, or Alleghany Mountains, belong to a very early geologic age, and that the whole chain is the central rib of that part of the United States which lies east of the Mississippi River. I learned that if a line be drawn from east to west in North Carolina, from the coast level to the top of the highest mountains, within that range of two or three hundred miles would be found the whole flora and fauna that exist from the St. Lawrence River to the end of the range in Alabama—a distance of nearly two thousand miles. I learned that in prehistoric geologic ages the Gulf of Mexico had extended far inland, even over what is now known as the blue grass section of Kentucky, depositing there the flakes of phosphate of lime which give it its great fertility. I learned also that the ocean had once covered the Atlantic States close up to the foothills of the great range of mountains. Under these conditions, it appeared that the disintegrated rocks of the mountain section, moved by erosion, had formed the very strong soils of the high valleys and of the mountain sides, yielding the elements of the vast forest therein. It also appeared that the sedimentary deposits from the great gulf on the western side, and of the sea on the eastern side of the mountain range, had left the phosphates and other elements of fertility in greatest abundance, which form the strength of the soils both in the hemp and wheat-growing section west of the Alleghanies and in the cotton section of the East and South. It also appeared that in the light soils of the second level or plateau on the east and that in the sandy soils of Florida, the elements of fertility existed in greatest abundance, giving them even a preference on many lines of production over the alluvial lands, the cane brakes and the river bottoms. In these sources of fertility largely consisting of infusoriæ and of fossil remains of marine and land animal life brought up by ocean currents from the tropics, I found the elements of the production of cotton, chiefly the phosphates of lime and potash. In respect to climate, the humidity brought from the tropics by the Gulf Stream is carried inland across the Atlantic States, condensed on the great range of mountains, making frequent rains with w heavy or destructive storms, and rendering a sufficient apply of water almost certain every year.

Later the wonderful function of bacteria which, living and dying in the nodules attached to the stalks of cow pea vines and other legumes, dissociate the nitrogen of the atmosphere, gives assurance of the renovation of the slave-stricken soils of the cotton states.

Cotton is a sun plant. It is apt to yield the largest and most unexpected crops of fibre in the drier seasons which fall short of drought. Its tap root penetrates deep into the ground, drawing up the material necessary for maturing the fruit or seed, of which the fibre is the wing or instrument of distribution. These conditions of soil and climate are the existing conditions conducive to the production of upland cotton—they are also conditions which are most conducive to raising sheep and to the production of wool.

I next discovered that the fibre of cotton is mainly carbon, which is derived from the atmosphere. It is nearly the purest form of cellulose that nature yields, carrying only upon the outside a resinous gum. The analysis proved that in a bale of cotton of five hundred (500) pounds, there are only four or five pounds of mineral element derived from the soil, while in the seed from which that bale of cotton has been separated there are about fifty pounds of mineral element derived from the soil, chiefly the phosphates of lime and potash. (See "Cheap Cotton by Free Labor," by Edward Atkinson, 1861.) Hence, when cotton is produced without brains or industry it is a most exhaustive crop. Under the former bad and wasteful methods of slave labor, which were described by Dr. N. B. Cloud, of Alabama, many years ago in the following terms: "You have gullied your hillsides and blasted your prairies, and being in possession of the best forage plants of the world, have rendered yourselves dependent on Northern hay for feeding your cattle," the cultivation of cotton coupled with the waste of seed was most destructive; but since the area of cotton land was so large and the cultivated cotton field so small, no difficulty ensued in keeping up an adequate supply of cotton and meeting the then undeveloped needs of the world.

When I first began the study of this subject a world's crop of seven million bales would have exceeded the demand. It

once happened in the early forties that a crop so excessive had been produced as to bear the price down nearly, if not quite, to four cents a pound on the plantation, yet that crop was little over four million bales of American cotton. On the other hand, DeBow, who rightly assumed to be the most intelligent representative of the Southern view of political science and statistics, fixed the limit of the production of cotton at the high price and not at the low price, for the reason that with every cent added to the price of cotton a hundred dollars were added to the price of the human chattel, then believed to be absolutely necessary to the production of the fibre. This economic error bore the evil fruits of later years.

Under these conditions cotton had assumed to be king. Little attention was then given to the development of any other Southern industry in the cotton States except a little sugar in Louisiana.

It has lately fallen to me to bring the present conditions of the production of cotton before the people of the Southern States in connection with a suggestion for raising sheep upon the cotton field as auxiliaries in the growth of cotton, and this led me to treat the adverse conditions which ensue from any approach to a monopoly. I may therefore venture to give the reasons why the people of our cotton States have only within a very short time been made aware of the bad methods by which they would have imperilled their control of the cotton trade of the world had not the right attention been now given to the true theory of converting the cotton fibre into the cotton fabric.

This subject of raising sheep in the cotton States has been dealt with several times since the end of the Civil War. It is, however, curious to note that in DeBow's work on the *Resources of the South and West*, published in 1853, the most complete treatise then existing, sheep and wool are hardly named. This gives another of the many examples of the barrier to industrial progress which often occurs from holding almost a monopoly in the production of any article of necessary or common use. One may almost assert that the greatest misfortune which could have happened to the cotton States is the invention of the Whitney cotton gin, and the control

which that invention gave them over the production of cotton. This invention perpetuated slavery for nearly a century beyond its natural life. It thus perverted the minds of the people of the South. It thus destroyed respect for the courts of highest jurisdiction. It thus retarded diversity of occupation, especially in agriculture. It thus kept the cotton States poor and the masses ignorant. It ended in civil war, costing five hundred thousand (500,000) lives and twelve billion dollars (\$12,000,000,000) in money.

The single crop system has been adverse to the progress of many sections. The wheat-growing States of the Northwest have lately entered upon a new era of prosperity on the adoption of diversified farming on lessening areas of land, after a period of great depression on wheat only.

Lower Virginia has been scathed by the sole product of tobacco. I have seen a field which the native farmers had abandoned as worthless, on which a Northern man, in a single year, by putting brains and industry into the work, made a crop of corn, seventy-five bushels to the acre. One stalk in my possession, cut in sections and sent to me, is nearly fifteen feet high.

The freeze of the orange trees in Florida has probably laid the foundation of progress in truck farming.

The all-cotton craze must soon give place to a new system of agriculture yielding varied products. Yet cotton is one of the two fibres which are necessary for clothing the human body. Wool is the other. Clothing is one of the three factors necessary to sustain life. All that we get in a material sense in and out of life is our board and clothing. How to get the greatest enjoyment of life and the most comfort is our objective point. Good and sufficient clothing is conducive to comfort. It follows that the production of wool on the cotton field is a vital question.

The time is now at hand when the two fibres must be produced from the same field, each increasing the product of the other, doubling the potential of every acre of land in its power to supply food and raiment, while diminishing the labor required in the work. The factors needed to compass this step in progress in the near future are brains and industry.

This suggestion for diversifying the agriculture and improving cotton staple is now being forced upon the attention of the cotton growers by the enormous production of badly ginned and badly baled cotton which brings to the grower little or no profit, with very insufficient remuneration even to those who make their own crops. It is now an admitted fact that the loss from bad baling, bad ginning and bad handling coupled with high freights, compress charges and high insurance rates due to these bad methods, amounts to three (3) or even five dollars (\$5) a bale, most of which is a dead loss. The crop of this year will approximate eleven million (11,000,000) bales. The loss of waste on this single crop will probably be forty million dollars (\$40,000,000) and cannot be less than thirty million (\$30,000,000) as compared with what might be recovered from its sale had the Southern people given their attention twenty years ago to the improvement of that branch of the manufacture or conversion of the cotton fibre into fabrics which must of necessity be conducted on or near the cotton field; to wit, the ginning, the baling and the preparation of the cotton for the factory. In place of giving the right attention to this branch of the work, the Southern people, having again been misled as to the relative importance of the cotton manufacture, have entered upon great undertakings in the conversion of the cotton fibre into cotton fabrics. Since 1880, they have added nearly three million (3,000,000) cotton spindles with a corresponding number of looms in the factories of the cotton States. This addition, mainly in the last ten years, has brought the whole cotton industry of the country to a condition of temporary excess of production; also bringing up the question whether or not this branch of industry will or will not be removed from its early situs in New England to the neighborhood of the cotton fields. In this matter the people of the cotton States have again been misled. Their progenitors thought the grass would grow in the streets of the cities of New England if the supply of cotton were cut off, while many of the promoters of the present rapid extension of the cotton manufacture in the South have urged their projects upon the ground that the cotton manufacture is one of the chief and most important sources of

the wealth of New England, by the transfer of which great advantages may be given with corresponding profit to the people of the South. This is as great a delusion as the former conception of King Cotton. The cotton manufacture is not an industry of paramount importance nor has it been a source of any excessive profit.

The spindles which have been added in the cotton States since 1880 have increased the total number in the South from five hundred and eighty-four thousand (584,000) in 1880 to three million two hundred and fifty thousand (3,250,000) in 1897. A few additions have been made in 1898. It is claimed that eighty million dollars (\$80,000,000) have been expended on these new spindles. That would be an excess of a fair valuation by about one-half. The new spindles added at a fair average or rather high average of fifteen dollars (\$15) per spindle might be valued to-day at forty million dollars (\$40,000,000), a sum about equal to the loss on the single crop of the present year due to the neglect of the people of the South in the conduct of the most important branch of the cotton manufacture to which I have referred, namely, the preparation of the cotton fibre for the factory.

Rapid advances are now being made. The invention of the cylinder bale, whether that form becomes universal or not, is rapidly bringing about a necessary improvement in the baling of cotton. That is the first step. This will be followed by improvements in processes which may and probably will result in the substitution of the roller gin for the saw gin. It is probable that cotton will be treated at the ginneries between the operation of the gin and the bale for the removal of leaf, dirt and other foreign substances. The fibres of cotton are more separated each from the other when they leave the gin before they are put into the bale, than at any other stage. If the cotton is treated at that point it is probable that a large part of the destructive processes in opening and picking now necessary in the factory, will be done away with. It is even probable that the preparation of the cotton for the carding engine may be very nearly completed, if not wholly completed, at the cotton ginners. In such event this branch of the work will be

subject to a complete revolution. The ginning establishment, now a very crude affair, will become a factory in the true sense, in which all the work will be divided so that a larger part of the process of converting the fibre into the fabric will be rightly done.

The whole process of the cotton manufacture from the field to the factory, subject as it has been to inventions of the highest type, is yet a compromise, crude and imperfect at almost every point; the initial strength of the fibre being sacrificed in order to attain quantity in the product. If the initial strength of the fibre as it is drawn by the hand from a mature seed be established at an index number of one hundred (100), more than one-half, probably three-quarters, of that initial strength is lost on the way from the field to the consumer, when the fibre is tested in the woven fabric. As yet no scientific basis exists, and no series of experiments are of record for determining the point or points at which this impairment is greatest. Measures are now being taken to this end which will probably become one of the most important and useful functions of the textile schools. Plans have been developed for measuring the strength of a given number of fibres from the seed,—from the several types of gin,—from the compressed bale,—from the opener,—from the first and second pickers,—and from the various processes of drawing, carding, spinning and weaving. The establishment of both roller and saw gins on a scientific basis at the Advance Gin & Mill Company of Vicksburg, will enable a sufficient number of bales of cotton to be treated in various ways so that each can be followed from the field, through the Textile School into the specific web of cloth, while all along the line the injurious effect of each process may be determined.

Some years since Prof. J. M. Ordway devised apparatus for testing the initial strength of cotton fibres drawn from the seed by hand. The fibre of cotton is in the form of a twisted ribbon, pointed at one end—thicker at the edges than in the middle. It is by the interlocking of the correlations of one fibre with another that we are enabled to spin these fibres. The average diameter at the widest part of 450 tests proved to be one eleven-hundredth ($\frac{1}{1100}$) of an inch in the green seed cotton of which

the great commercial crop consists. The average breaking strain of each fibre on the average is 133.1 grains, average length 1.085 ms. Two and one-half million of these fibres laid compactly together would make one square inch, which would give a tensile strength per square inch of 46,000 pounds or a very little less than that of wrought iron. Under the treatment which the fibre now receives on the way from the field to the cloth, much more than half the initial strength is lost, probably three-fourths.

I have said that our Southern friends have committed as grave an error in their estimate of the importance of the cotton manufacture of the North to the community as they did in their estimate of the importance of the cotton fibre when they named it "King Cotton."

The public mind is very apt to be misled, when dealing with specific branches of industry, as to the relative importance to a given community of the arts which are mainly conducted under the collective or factory system of labor wherein the work is subject to very great sub-division, when compared to the vastly greater and more important branches of work which are of necessity individual, each requiring not only the directing mind but the directing hand of man or woman upon or behind the tool or machine.

In an analysis of occupations on the census of 1880 which will be found in my "Distribution of Products," I found to my surprise that if all who are occupied in the collective or factory system where the work is done under great sub-division by machinery nearly automatic, including textile arts, clothing factories, boot and shoe factories, machine shops and all that could for any reason be put in that category, not over one hundred (100) persons in each thousand (1,000) occupied for gain are to be found in such branches of industry. There are great collective forces outside these buildings, like the employees of the railway, the great gangs of workmen who construct railways and in many other branches of work. But in this latter collective class each man works individually. The quick brain must direct the ready hand. The mechanism can-

not be trusted to do its own work with here and there a touch. This marks the difference between a true collective factory system and what I have called the individual system of labor. From the best study which I can give to the subject I have become convinced that ninety (90) per cent. of the work in the most progressive and machine-using country will always require the individual brain, hand and aptitude, while with every advance even in the collective system of the factory the highest rates of wages are and will be earned by the operatives who make the products at the lowest cost by the unit of labor. Man cannot be made an automaton. The brain will tell and the reward of labor will be in just proportion to the intelligence and industry by which every man makes and will continue to make his own rate of wages in whatever branch of work his lot may happen to be cast.

Even in war, it is the man behind the gun more than the gun that decides the contest provided the leader who directs the forces is competent.

In the domain of commerce and manufactures it is the man or woman behind the tool or machine who attains supremacy, provided the organizers of the factory or the workshop know their business. But when they spend their efforts in the lobby of Congress demanding the support of legislation, their efforts are apt to be futile and their works are apt to lag far behind others which have been built up without special legislation, protected arts always seeking but seldom attaining a firm and stable position on their own merits.

A close study of the few branches of industry which have been subject to the influence of legislative protection will show greater fluctuation and more frequent loss and failure than are found in the vaster portion of our domestic manufactures which have been developed without legislative protection; often burdened by taxes upon their necessary material of foreign origin.

The rate of wages is not made or established by the measure of work which is done by the wage-earner. It is not the labor, the time or the effort of the wage-earner which gives him a claim upon a wage-payer. The rate of wages is fixed by the

service rendered and is governed by what the wage-earner saves the wage-payer from doing. The man who has the ability to organize and direct the work of a large number of wage-earners thereby enables each of them to earn more than each could have earned without the service of the organizer. While on the other hand, the man of sufficient ability to organize a great force might very easily supply his own wants by his own work if he gave sufficient time to that purpose. He saves his own time by directing the work of others to their great benefit, to the end that the combination yields to the community an increasing abundance. Under these conditions every man, whether employer or employed, whether working for profits, salary or wages, fixes his own rate of wages or of his own earnings by the measure of the service which he renders to others. When these facts are fully comprehended there can be no conflict between labor and capital or between employer and employed.

In the discussion of manufactures in connection with the tariff question, if the average man is asked to define the word "manufactures," a very large proportion will refer at once to the textile arts and to the manufactures of iron, almost wholly ignoring all the lesser branches. In the public discussions of economic theory these arts, with perhaps chemicals, glass and pottery added, are dealt with almost as if there were no other manufactures of any magnitude or importance. Yet each of these arts is relatively very unimportant in ratio to the aggregate of manufactures, in the number of establishments, in the capital invested in the value of the product, in the number of persons occupied, and in the rates of wages or earnings of the employees. The value and importance of the product of the cotton plant is exceeded by many other products of agriculture; yet it is the subject of constant discussion and attention, exceeded only in that matter by the contest over the wool fibre. Cotton is very much more important than wool. Wool is relatively insignificant. It constitutes from one to one and a half per cent. of the total product of agriculture. If wool-growing were a distinct branch of industry conducted by a certain number of people separately from all other branches of

farming, it would yield the average returns which farmers and farm laborers secure to possibly a hundred thousand (100,000) men, a little more or less,—out of nine million (9,000,000) or ten million (10,000,000) persons occupied in agriculture. Yet the most absurd statements have been imposed upon the public in advocacy of a heavy tax on foreign wool, on the ground that there are two and a half million (2,500,000) flock masters whose sole income rests upon a product which, if that number depended upon it, would yield each one from twenty (\$20) to thirty dollars (\$30) a head for his year's work.

One of the suggestions which I therefore venture to make to economic students is to make a study of the occupations of the people of this country as they are given in the census tables, with a view to determining what arts exist in this country of necessity; what arts, especially manufactures, exist in this country because owing to natural conditions and to the aptitude of the people no other country can compete. Then give regard to the relatively very small number of branches of industry and of persons occupied for gain who are or can be subjected to foreign competition through the import of a product of like kind. The forms for such an analysis will be found in my book upon the "Distribution of Products," published by G. P. Putnam's Sons, based on the figures of the census of 1880.

Another analysis would now be very timely to which this discussion of the cotton manufacture directly leads. The special report on Manufactures in the census of 1890 was for some reason or other immensely inflated, if I may use that word, apparently for the purpose of showing an enormous increase in the manufacturing industry in the decade which elapsed between the tenth and eleventh census. The facts of that gain might have been made sufficiently manifest without including under the title of manufactures "the repairs of steam and electric railways" and without including "illuminating and heating gas." Neither is it conducive to scientific work to deal with a census of manufactures which includes the gross value of flour and grist mill products for over five hundred million dollars (\$500,000,000); slaughtering and meat packing to nearly six hundred million dollars (\$600,000,000), without calling any attention to the fact

that in these arts, which constitute about one-eighth part of the total, are products of agriculture but slightly advanced from their primary to their secondary forms. Yet this total of so-called manufactures is contrasted as a whole with the computed products of agriculture including the live beasts and the crude grain. One can only regret that the direction of the census of 1890 had not been governed by more competent persons. Yet this inflated table of manufactures is of the utmost value for purposes of analysis. The manufactures of the country are listed under more than three hundred and sixty (360) different titles, of which the textile arts and the crude productions of iron and steel, together with all other arts of which a product of like kind could be imported, constitute a very small proportion. I venture to suggest an analysis of this table of manufactures in connection with the complete analysis of all the occupations of the people. I have myself adopted five sub-classes.

First. The mechanic arts which are necessarily to a very great extent conducted all over the country mainly on the individual principle and not on the collective or factory principle.

Second. In the second class I have placed the arts which are almost wholly conducted within the limits of the country and of which great quantities are exported,—such as agricultural implements, boots and shoes, carriages and wagons, butter and cheese and the like.

Third. In the third category I have placed arts which are by far in largest measure conducted within the limits of the country but of which some small imports may be made, such as nets, seines, paints, paper, paper making, photograph material, plated and Britannia ware, printing and publishing and the like.

Fourth. It is not until we come to the fourth class that we reach arts of which any considerable part, enough to be called a real competition, can be imported from a foreign country.

Fifth. Articles which are and which may remain subject to a very considerable competition.

After dealing with these five categories as judiciously as I am capable of doing, I reach the results which are given in the subsequent table.

If there be added to the small proportion of those occupied

in manufacturing now subject in any considerable measure to foreign competition the yet much smaller proportion of those occupied in agriculture in 1880 who could be subjected to foreign competition, it becomes plain that a tariff for protection with incidental revenue can only work to the injury and restriction of by far the larger number, while conferring a very doubtful benefit on less than one million (1,000,000) out of the seventeen and a half million (17,500,000) who were then occupied for gain. Since 1890 many of the products which were then subject to foreign competition are now being exported in large and increasing quantities.

An analysis of all occupations of agriculture and of the manufacturing and mechanic arts for the purpose of determining those which are of necessity home industries and those of which we might import products of a like kind from a foreign country, will vary according to the judgment of the expert and his knowledge of the facts. Yet I cannot find any considerable margin for error if the analysis is conducted exclusive of our traffic with Canada. Of course if Canada were included we should be obliged to include our whole grain crop as subject to foreign competition, and yet that would imply very false inferences, because having the advantage of a better climate and more Southern sun, we sell to Canada a very much greater quantity of the products of agriculture than we can ever buy from her.

I consider the table of Occupations a better one than the census of Manufactures, because the same enumerators who counted the population ascertained in what branches of industry those who were occupied for gain were engaged. The methods of compilation have not been greatly varied from census to census. Therefore one can follow through the tables the development of certain rules and the progress of the several States in their adjustment to certain proportions now listed under five categories, namely, in agriculture, in professional service, in personal service, in trade and transportation, in manufactures, mechanic arts and mining. These studies ought to be taken up by many experts who by comparison may reach final conclusions. This subject was first developed and

treated by myself in the "Distribution of Products." If any students shall undertake these analyses I should be glad to correspond with them, to the end that the right method may be applied in each case.

I will refer only to one common fallacy which is fully disposed of by a comparison of decade by decade of persons engaged in trade. It has often been alleged and is commonly believed that the great establishments, department stores and the like, are destructive to small shops. According to my analysis and also my observation, there is no truth in this commonly accepted idea. The large shops are dealing at the least cost with the huge increased volume of products which must now be distributed. There are as many small shops and there are a larger number of people occupied in trade in ratio to the population at the present time than there ever were before. Many other fallacies will be exposed by scientific analyses on the lines which I have suggested.

Again: I venture to suggest that this method of analysis should be applied to the separate statistics of occupations and of manufactures of the different States and also of the different cities. Many surprising results would at once be developed. For instance, in 1880 the occupations of the people of Ohio had become adjusted to almost the same proportions as those of the nation taken as a whole. Ohio has been extremely prominent in every effort to support a policy of protection with incidental revenue; yet including wool and iron among the products which might be subjected to competition from a foreign country, if we deal with numbers by proportion of values, there were not fifty thousand (50,000) persons, including farmers and miners and a few manufacturers, in Ohio out of one million (1,000,000) occupied for gain who could then have been subjected to an import of a foreign product of like kind, while Ohio depends in very considerable measure upon exports for her prosperity. If the figures of 1890 be analyzed there are not three (3) per cent. of the people occupied for gain in the whole State of Ohio who could themselves be subjected to competition from any foreign country exclusive of Canada, while the sales of the agricultural products of Ohio in Canada are larger than the imports. If we take up some of the great manufactur-

ing cities of the West it will be found that there is not in many of them a single art of any consequence subject to foreign competition, while there are great branches of industry, like the making of agricultural implements, of furniture and of many other articles, which are reaching for markets all over the world.

It would be very desirable if some person of sufficient means should become interested in this subject who would offer prizes for treatises on the line proposed, to the end that the attention of the people of each State and of each city should be brought to the facts, and when those facts have been disclosed there can be little doubt that the policy of the country in the collection of its necessary revenue would be governed by the simple rule, "All taxes that the people pay the Government shall receive." When that simple rule is adopted in practice all efforts to pervert the power of taxation to purposes of private gain will be ended for all time.

ANALYSES OF MANUFACTURES CENSUS, 1890.

	Capital.	Employees.	Wages.	Average.	Product.
I.....	\$2,436,176,836	1,667,643	\$843,377,287	\$506	\$4,028,806,879
II.....	1,619,658,977	1,437,373	665,400,223	463	2,309,433,370
III.....	1,435,881,558	796,730	451,231,209	566	1,835,985,425
IV.....	757,508,944	616,273	249,367,499	404	859,330,903
V.....	272,060,659	194,733	73,297,495	376	334,281,004
	<u>\$6,521,286,974</u>	<u>4,712,752</u>	<u>\$2,282,673,713</u>	<u>\$485</u>	<u>\$9,367,837,581</u>

Wages 24.36 per cent. of valuation of the product.

The manufacture of cotton goods with which I have been dealing I have placed in Class IV, subject in part to foreign competition. We are exporters of the coarser fabrics, but still import a few fabrics made of cotton; few of them woven goods,—mostly laces, embroideries and the like.

This brings us to the relative importance of these several branches of manufacturing industry. I do not undervalue the cotton manufacture. I have been engaged in it all my life. It belongs in this country in the nature of things, and in my judgment its progress has been retarded and rendered subject to very great fluctuation by the constant variations in the tariff policy of the country. The steadiest and most satisfactory progress within my own experience was under the low revenue tariff of 1857. It will be remembered that the first attempt to protect the cotton manufacture by duties on foreign imports, instigated by John C. Calhoun in the effort to make a home

market for cotton. That was, I believe, carried into effect in the tariff of 1816, when Hamilton's very simple revenue tariff began to be converted from a tariff for revenue with incidental protection into the form in which it has finally culminated, of a tariff for protection with incidental revenue. Calhoun soon witnessed the error of his ways, but under the lead of Clay against the opposition of Daniel Webster the factory system was forced upon New England. We have adjusted ourselves to it and have on the whole made it profitable; not more so if as much as many other arts which have been less subject to the interference of legislation which are of much greater relative importance in given communities, as for instance, the New England art of manufacturing boots and shoes.

In order that these relative conditions may be contrasted and bearing in mind the inflated figures of the census table of manufactures, we find in a Special Report on the Cotton Manufacture that in 1880 the amount of capital invested was two hundred and thirty million nine hundred and ninety-three thousand five hundred and sixty-seven dollars (\$230,993,567) in the whole country; the number of spindles, fourteen million five hundred and fifty-three thousand three hundred and twenty-three (14,553,323); looms, three hundred and twenty-four thousand eight hundred and sixty-six (324,866). Any one who is cognizant of the average value of cotton spindles will observe that the amount of capital said to be invested is excessive. These figures do not include the quick or active capital but are intended to represent only land, buildings and machinery. The number of employees, the majority of whom are females and children, is two hundred and twenty-one thousand five hundred and eighty-five (221,585); the sum of wages sixty-nine million four hundred and eighty-nine thousand two hundred and seventy-two dollars (\$69,489,272). About one-third part of these employees were occupied in Massachusetts to the number of a little over seventy-six thousand (76,000), but that is only about fifteen (15) per cent. of the total number of persons listed in the manufactures of Massachusetts taken by itself.

If it were possible by any legitimate competition to transfer cotton manufacture from Massachusetts to the Southern States, a few cities in New England would have a severe reversal. A

small market for farm products would be for the time reduced; but it would not take very long to find other and perhaps better occupation for the resident population of the State; the cotton factories being mainly operated by foreigners, mostly French Canadians. This marks the delusion of the Southern people, whose efforts might well be directed to the development of all the lesser arts in which a very small capital serves as the basis of a very large product, in place of attempting an art on which the margin of profit is very small and which takes a thousand (\$1,000) to fifteen hundred dollars (\$1,500) to start one operative, and which belongs rather in a cold or temperate climate where indoor work is comfortable throughout the year, than to a warm or hot climate where indoor work for ten or eleven hours a day is during the large part of the year almost unbearable.

The development of the Southern cotton manufacture has been to a large extent promoted by methods very similar to those which first led to the boom in Southern town lots and hotels; next to the boom in isolated and misplaced iron furnaces, many of which have never been put in blast, and which has taken its last form in a misdirected effort to do that part of the cotton manufacture for which the Southern States are as yet the least prepared, to the neglect of that part which must of necessity be conducted on or near the cotton fields.

Such are the conditions which I have ventured to present to my Southern friends from time to time during the last twenty years, warning them of the dangers of an excessive production and low price of cotton and an excessive production of cotton fabrics beyond the necessities of the country itself, for which as yet no sufficient outlet for export to other countries has been opened.

It is to be expected that under the present conditions there will be a survival of the fittest, distressing in many of its phases. A considerable number of cotton factories in the North which have not been kept up by changes and additions of new machinery have been or will be stopped and perhaps never started again. On the other hand, there are many of the new

laid mills in the South which have been promoted by contractors and the vendors of machinery, especially those under

the corporation system for which many of them are too small, in which the stockholders will get the experience and their successors will get the mills at a low cost.

We are in a transition period in the production and treatment of the cotton fibre and in the manufacture and disposal of the cotton fabrics, which to the best of my ability I have attempted to trace in this paper, in which there are doubtless many mistakes, but in which I think is more truth than error.

The number of cotton spindles in the whole country is now a little over nineteen million (19,000,000). Many of these are old and out of date. Many, as I have stated, are out of place and in excess of present wants; but we are constantly gaining in the amount and diversity of our exports and shall gain yet more when we remove the heavy fines which under the name of duties on imports are imposed on the goods for which we might exchange more and more cotton fabrics.

Again: The population and purchasing power of this country is becoming augmented rapidly. Yet even that may have a cause of depression in some of the branches of the cotton industry. With the increasing welfare of the people the average demand is for a much higher class of cotton fabrics than were formerly suited to the markets. Many Northern mills have lost their markets, not only because these low grades of goods have been successfully manufactured in the South, but because the demand for them within the United States is very much lessened.

Again: In the matter of printed calicoes. The old-fashioned common print has become so low in price and relatively so unattractive as compared to the wider, finer and better goods that great masses of people will not expend their time in making cheap prints into garments. Hence the necessity of an adjustment, especially of looms, to new conditions.

The general progress of the manufacture of cotton has been marked by the same incidents which govern progress in all arts. I have repeatedly called attention to the fact that sixty years ago it was a step in advance for the daughters of the farmers of New England to go into the cotton factories, where they worked fourteen hours by the bell, twelve and a half hours of actual work, in a low studded, badly lighted and ill ventilated building and upon machinery far from automatic. Under those

conditions they earned less than half the wages per year and much less than half per hour for their work. compared to the wages of the foreign, mostly French Canadian operatives in the New England factories, who now work in high studded, well lighted and well ventilated factories less than ten hours' work per day.

In the same period through the application of science and invention, which have assured to the working men and women in every art an increasing share or proportion of a constantly increasing product while the margin of profits has been vastly reduced, the average product of a given cotton fabric for one year's work of the average operative is now thirty-two thousand (32,000) yards a year where it was less than five thousand (5,000) yards fifty years ago. Yet as I have said, the whole process of converting the fibre into the fabric is a series of compromises in which quality is sacrificed to quantity of product. The improvements which have now fairly begun by almost the first application of scientific methods to the production of the fibre from the field to the cloth, will increase the average product per operative in each year on the given fabric which has been dealt with from thirty-two thousand (32,000) probably to forty thousand (40,000) yards a year within the next decade, and as these improvements work with accelerated speed and the margin of strength and quality to be saved is very large, it is not improbable that those who will enter into this branch of industry, will within twenty years witness the average product per year of each individual hand of fifty thousand (50,000) yards against five thousand (5,000) fifty years ago. What is true in this art is true in all arts which are left free in their development from legislative interference, high wages or earnings in money or what money will buy being the necessary correlative, complement or resultant of the lessened cost of production, warranting the truth of the economic axiom laid down by Bastiat that "In proportion to the increase of capital the absolute share (of a given product) falling to capital is augmented, but the relative share is diminished; on the other hand, the share falling to labor is increased both absolutely and relatively."

EDWARD ATKINSON.

Boston, July 22, 1898.

THE ESSAY OF MALTHUS: A CENTENNIAL REVIEW.

ONE hundred years ago appeared the first edition of the *Essay on the Principle of Population*, by Thomas Robert Malthus. It attracted immediate attention and has been the subject of almost continuous discussion ever since both in economic and popular circles. It has been answered or defended elaborately many times, not to mention the multitude of briefer expositions and criticisms. One is tempted to think that in this centennial year of its publication the time has come to pass final judgment on the work, and to close the controversy. Such is not, however, the task that is here undertaken. The occasion and the circumstances of the appearance of this book, the interests and cherished opinions which it affected either favorably or unfavorably, the manner of its thought and mode of its expression, all predestined for it stormy discussion rather than calm and scientific study. Such a controversy can not be brought to a close by any magazine article, for it does not arise merely from differences of judgment on a formal proposition and the questions connected with it. It arises also from differences in temperament, in sympathies, and in the general attitude toward social questions. It may, however, be of interest and of service to point out the occasions for these misunderstandings, and the nature of the differences; and to indicate the trend of scientific judgment on the Essay of Malthus and the doctrine of population.

One need only refer to the oft noted circumstances of the time in which the Essay was written. The industrial revolution was in full course. The growth of factory centers, of population in general and especially of city population, the heavy taxation and the high price of grain caused by the war with France, the radical political and socialistic ideas of the time, are all facts which help to account for the book and many of the ideas in it. These facts were all present in the author's mind as he wrote, but it was the political and social discussion

embodied in the writings of Godwin which gave to the Essay its first form. Godwin, infected with the enthusiasm of the French Revolution, had preached a doctrine of equality, not only in political rights, but in material goods as well, and had pictured the era of happiness and perfection which would then ensue. The objection had been urged against communism of goods many years before (by Wallace in 1761,) that the growth of population would destroy any such society, reducing its members from a condition of plenty, brought about by the equal division of goods, to want and suffering. Godwin, in his book on *Political Justice*, published in 1793, had referred to this objection, and had given what he calls "the obvious answer" to it, "that to reason thus is to foresee difficulties at a great distance. * * * * Myriads of centuries of still increasing population may pass away, and the earth be still found sufficient for the subsistence of its inhabitants."¹ Again in 1797 Godwin dealt with the same subject in an essay entitled *Avarice and Profusion*, one of the series called the Enquirer. Daniel Malthus, Robert's father, a country gentleman of literary tastes, was strongly attracted by these pictures of equality and universal happiness. Robert, a young man of thirty years of age, had taken his master's degree at Cambridge the year before. He had read Adam Smith and was inclined good-naturedly to oppose the sanguine social opinions of his father. He chose as his chief, indeed almost his sole, weapon against the system of equality or community of goods, that which Godwin himself calls in the title of his chapter the "Objection to this system from the principle of population."² The phrase is apparently Godwin's; the argument is Wallace's. It needed only that Malthus should develop, illustrate, and apply the thought to this political speculation and to various practical questions, to attain fame.

We shall refer again to the use made by Malthus of "the principle of population" in his argument against communism, but let us now first inquire what the principle is of which he writes. A century later, after all that Malthus and others have

en about it, there still remains some doubt as to just what

¹*Political Justice Book*, VIII, ch. 9.

² *Idem*.

he meant by the phrase. His concept is a shifting one and his language not consistent.

(1) It seems at one point¹ clear to the reader that the principle is: "The power of population is indefinitely greater than the power of the earth to produce subsistence for man."

(2) Following this is a sentence apparently meant to express the same thought in a different way: "Population when unchecked, increases in a geometrical ratio; and subsistence for man in an arithmetical ratio."²

(3) Mr. Edwin Cannan thinks the principle is the "degree of misery" which necessarily results when population begins to outrun subsistence; and he supports this view by several apposite quotations.³

(4) The writer has shown elsewhere⁴ that there are several other expressions also that may be looked upon as statements of the principle. Malthus uses the phrase "principle of increase" as the percentage of increase actually taking place, so that if the population were stationary there would be no principle of increase.⁵

(5) Again he seems to consider either the birth rate alone, (not the net increase,) as the principle, or the combination of circumstances that favors a high birth rate, though no net increase of population occurs; a very complex concept.⁶

(6) Again, still varying the thought, the "principle" of "increase" or of "population" is a force or energy exerted to increase the population, mainly if not entirely by the increase of the birth rate. This use of principle makes it in several instances synonymous with "power of population" and "tendency of population" as Malthus uses them. It appears to become at times an expression for "the passion between the sexes," "the power of reproduction," or the "fecundity" of mankind.⁷ Each one of these different things, some psychological, some physiological facts, is in turn referred to as "principle of population."

¹ Parallel Chapters from the First and Second Editions, N. Y., 1895, pp. 6, 7.

² Idem, p. 9. ³ *Theories of Production and Distribution*, London, 1894.

⁴ *Versuch einer Bevölkerungslehre*, Jena, 1895.

⁵ E. g. *Malthus*, 7th edition, pp. 15, 238.

⁶ Idem, p. 54.

⁷ Examples in *Versuch einer Bevölkerungslehre*, pp. 16-17.

(7) Spencer, in his *Study of Sociology*,¹ says that a law should not be regarded as itself a power or force, but that "the accepted conception of law" among "philosophers and men of science" is "an established order, to which the manifestations of a power or force conform." We should expect a principle of population to be the formula of verbal expression of such an order. The chief question which the principle of population should help us to answer is: why is the population of the world and of the different countries what it is? What, if anything, regulates the number of people living in any land? This sense of the phrase "principle of population" Malthus was also conscious of, in fact, it was the central concept around which all the others were grouped. He speaks of the principle of population as a thing to be understood, of facts as exemplifying it.² The principle should express the relation between one fact, the number of people, and some other fact. This other fact Malthus thought to be the means of subsistence, or quantity of food available for the nourishment of man. The principle of population in this sense is: The population is determined by the quantity of food. The demonstration of this in the mind of Malthus was simple, and he thought, conclusive. Food being necessary to life, population can never be greater than the food will nourish; it may, however, be so great, that food will be insufficient for health, in which case there will follow famine, suffering, disease. Vice and moral restraint also aid to reduce the birth rate and thus keep population to the level of the food. It will never for any considerable period be below this level, because of the "tendency of population" to outrun food; that is, if there is any food available for more people than will surely be born, but if there are more people needing food it is by no means sure they will find it.

The reader who will consult the pages even of the last edition of the *Essay of Malthus*, in which all his amendments and corrections are embodied, will find in almost every chapter illustrations of several of the meanings of "principle" above referred to. It is of the essence of this criticism to contend not for one exclusive interpretation of the words of Malthus,

¹ P. 42.

² E. g. *Malthus*, 7th ed., pp. 173, 215.

but to show the changing and dissolving nature of his thought on even the most fundamental factors of the problem he dealt with. That this is, however, the central thought of the Malthusian doctrine, the one to which Malthus ever reverts, will be evident to any one, who, with the thought clearly in mind, will undertake to read the Essay itself. The following discussion, however, is not entirely bound up with this interpretation, and does not enter into mere verbal criticism of the Essay, but deals rather with its general tenor. While treating of its defects and inconsistencies the attempt will be made to furnish a brief guide to the study and judgment of Malthus' general body of doctrine.

1. It is to note that the criterion or regulator of the population with Malthus is an objective one, the level or amount of food. In many connections this level seems to have in his mind a fatalistic character. Just what determines its amount he never clearly explains or even attempts adequately to discuss. The means of subsistence are a fixed thing at any moment, and as to changes that take place over a series of years there seems to be only an occasional or vague recognition of the elastic nature of the food supply. It has, in consequence, been contended by able critics¹ that in arriving at his general conclusions Malthus did not have in mind at all the principle of diminishing returns in agriculture. This appears, though, to be a mistake; the essential thought of diminishing returns is included in the contrast between the increase of food and of population. But what is absolutely certain is that Malthus fails to apply the concept of technical diminishing returns consistently, and that he frequently looks upon the limit of food as a fast and unyielding one. He never clearly grasps the difference between a real increase of food and a merely potential increase. This potentiality is always present, since more labor will always be able to secure more food absolutely, though less relatively. With Malthus, however, there is generally the implication that all of the energies of the population are devoted to food production, and that therefore there is no productive

¹ Edwin Cannan, *Production and Distribution*.

ings that is lacking in Malthus. Private property and existing institutions limit population, said Godwin, and this works a hardship. True, replied Malthus in substance, they do limit population and thus prevent all from being reduced to the level of the poorest. The real check to population is "institutional," says Professor Hadley, expressing the conclusions of the later studies of the history of the family, of private property and of various other regulative institutions that have displaced a more primitive communal life. These institutions, as we now see, bring home to the individual or to the smaller family group the responsibility for too great a production of children, or too small a production of food. This much Malthus saw; but after thus applying the concept of private property in his discussion of communal society, he turns to the discussion of the problem of population in modern nations and in many connections applies to them the conception of a communistic state. The movement of populations as a whole is now a resultant of a multitude of more or less independent movements of family groups. The virtue of private property largely consists in its offering a way of escape to the provident and the capable from the miseries of excessive population in a communistic state. To think and speak now of the population as a homogeneous whole gradually increasing until it exceeds the food supply is a *lapsus mentis* into the communistic concept.

3. A point closely connected with the foregoing, yet deserving of separate mention, is the habit that Malthus had of ignoring differences in the industrial quality and the economic condition of the elements composing the increasing portion of the population. He did not recognize that it made any important difference which of the family groups increased, since in any case the total population would make greater demands on the food; neither did he clearly recognize that differences in mental and physical capacity in the oncoming additions to the population were important as affecting the available food supply. This being in some unexplained if not inexplicable way, fixed, and every mouth calling for its quota, it is a simple problem in addition. If he would abolish public aid to the poor, it is not because the more ignorant and incapable elements of the population are

thus encouraged to propagate and the average of the industrial and moral capacity of the population is thereby lowered; but it is because the population is thus increased while the food supply is not, and in consequence just that much food must be taken from the self-supporting laboring classes,—a view which probably contains an ounce of truth and a pound of error. We now recognize that the elastic limit of food will yield to the more vigorous pressure of more intelligent and capable individuals. A fertile and sparsely settled country may be made industrially poorer by additions to the less capable portions of its population; an old and densely settled one might be enriched by the increase of the better elements. Likewise additions to the family groups already near the margin of want will have results much different from additions to the groups well provided with food and able to secure more. Malthus dealt with the problem in bulk, and the finer analysis which alone can lead to valid conclusions on this subject, is wanting in his treatment.

4. In saying that Malthus overemphasized the objective factors of the problem, it has already been implied that he underrated the subjective or psychological factors. He did not entirely overlook them, but never succeeded in harmonizing them with his fundamental thesis. The Malthusian principle would attain its maximum validity in the case of herbivorous animals, safe from all enemies, on an isolated island. The food would be the measure of the increase of population. But in the case of men cultivating the soil and influencing the birth-rate through various institutions, the "principle" would certainly be profoundly modified. Malthus saw, not as an afterthought, but almost at the first glance, that such a conscious and volitional control in fact takes place in civilized society. It is the essence of his argument against Godwin, as already mentioned. Malthus never after that came as near again to a correct conception of the influence of this factor. There has been a curious and almost universal misunderstanding of the attitude of Malthus on the subject of "moral restraint" in his first as compared with his second edition. The belief is general that this check was newly introduced by him in the second edition in 803. By his more faithful disciples he is thought to have

thereby amended all the defects of the first form of the doctrine, and to have evaded all objections that could be made against it. Others (e. g. Bagehot) think that he thereby radically changed the character of his views. A considerable change can indeed be noted in the *tone* of the author's conclusions, from those which have "a melancholy hue"¹ to much more hopeful ones as to "the probable improvement of society."² But the argument is essentially unchanged. In the statements of Malthus himself, in the preface to the second edition, is found the basis for the usual misunderstanding. He says: "Throughout the whole of the present work, I have so far differed in principle from the former as to suppose another check to population possible, which does not strictly come under the head either of vice or misery."³ Moreover he had said in the first edition that "all these checks may be fairly resolved into misery and vice," whereas in the later edition he formally adds moral restraint to the list.⁴ A glance, however, at the first edition, shows that in it moral restraint was distinctly recognized by Malthus as a check, in fact was greatly emphasized, though he did not call it by exactly that name. He says he means by "moral restraint" "a restraint from marriage with a conduct strictly moral."⁵ He said in the first edition that "restraint from marriage almost necessarily, though not absolutely so, produces vice,"⁶ which recognizes a "moral restraint" of marriage. In chapter four he shows at length how the "foresight of the difficulties attending the rearing of a family acts as a preventive check" on the rapid increase of population. This "preventive check appears to operate in some degrees through all the ranks of society in England." He then illustrates by the cases of the man of liberal education, the sons of tradesmen and farmers, the laborer, and servant who lives in gentlemen's families. Nothing therefore but the descriptive word "moral" is added in the second edition to the force of this recognition of the volitional element; the thing described is the same.

Only recalling that Malthus gave a very narrow meaning to

¹ Preface to 1st edition.

² Preface to 2d edition.

³ Parallel Chapters, p. 70

⁴ Idem, p. 90.

⁵ Idem, p. 90.

⁶ Idem, p. 14.

moral restraint, that he never distinctly recognized the possibility of a moral restraint in but only from marriage, let us consider how moral restraint as he meant it fits with the general principle. If human volition can by any method limit the birth rate, can reduce the number of people in the various social classes and family groups below the maximum possible, and consequently reduce the total population, what becomes of "the level of the means of subsistence" as the criterion of the population? Malthus seems to have reasoned as follows: limitation of the birth rate in this way occurs only because of the lack of the means of subsistence. It will never act therefore when food is plenty, will never be sufficiently strong to keep the population below the level of the means of subsistence, but only strong enough to help in keeping it from going beyond and producing misery. The ambiguity of some of the phrases here used has already been pointed out. Let us note more particularly only that of the phrase "the means of subsistence." Malthus uses it evidently in most cases as a synonym for food. Yet in discussing the preventive check he speaks of the refined tastes and sentiments which in many cases would have to be sacrificed by early marriage. He should have carried the thought further. Anything that becomes so essential to the happiness of a person that he or she will postpone marriage to secure it, is as much a "means of subsistence" in this connection as is food itself. It is, in fact, the marginal pleasures, the comforts and luxuries, the fear of losing which constitutes the real motives for abstaining from marriage throughout all classes of society. The lower the standard of life, the nearer the individuals are to the minimum of subsistence, the less does conscious forethought act to postpone marriage and reduce the birth rate. Malthus at times recognizes this fact clearly enough. He frequently seems to be trying to adjust it to his general principle. He says distinctly¹ that only such an increase in **the means of subsistence** as would be distributed to the lower **classes** would give a stimulus to the population. This impliedly **admits** all the objections above enumerated, but Malthus **evidently does not** consider that the admission is of great import-

¹ Parallel Chapters, p. 96.

ance. In fact, however, there is no limit that can *a priori* be assigned to the operation of volitional control of the rate of increase. All classes exemplify it to some extent. The phrase "level of the means of subsistence" becomes thus an abstract and almost meaningless expression for the maximum population possible to an individualistic society. It is a real maximum only for those classes in which at the same time the economic efficiency and "moral restraint" are at the lowest point.

These are not all the defects and inconsistencies of Malthus' treatment of the subject, but they are the leading ones. A coach and four can be driven in any direction through the formal portions of the doctrine. The obvious question is: Why could such vulnerable theoretical views have obtained so numerous and intelligent a following? We may summarize the answer as follows:

1. The soundest portion of his argument refuted the views of the more radical social reformers, and thus had, and have continued to have, much importance in discussions of socialism. Acceptance of the doctrine of Malthus, with all its inconsistencies, became the test of political conservatism. The questioning of its propositions was the proof that one held radical social views. Malthus was loved for the enemies he made.

2. The explanation of poverty which he offered, while fitting in well with facts of English experience, was most acceptable and satisfying to the well-to-do classes. It was one of the type of sweeping explanations of social misery, like that of Henry George's land monopoly, which leaves out of account the great factor of differences in men. Its absurdities are on the face of it, and the faith of Malthus himself in this explanation became less than half-hearted as years went on. Yet its simplicity and universality still make it to many the readily accepted and self-evident theory to account for the presence of the poor-house on rich prairies newly opened to settlement.

3. Being at once incorporated with the system of economic thought then forming, it became interwoven with all the leading tenets of so-called orthodox science. The rejection of it threatened to bring the whole economic structure toppling to the ground. Only in the recent period of the economic renaiss-

sance has it been possible to criticise it in a calm scientific spirit without appearing to be an economic anarchist.

4. The very defects of its presentation by Malthus contributed to its continued success. Never have been brought together into single propositions concepts more vague and shifting in meaning than those in this Essay. Such phrases as "tendency of population," "power of population," "level of food," etc., etc., are beyond all salvation for clear thinking. The more one studies, for instance, the proposition, "Population has a tendency to increase faster than food," the more is one convinced that, simple as it at first seems, it is an utterly illogical combination of ideas. As occasions for controversy such propositions are unsurpassed. If one confidently undertakes to overthrow an evident error, he finds himself suddenly in the Antaeus-like arms of an unquestionable truth.

5. Finally, and closely connected with the last, are to be mentioned the facts of great significance and importance to which Malthus appeals for support. Strange to say, it has very frequently been not the illogical slips, the inconsistent word-usage, or the unwarranted conclusions of Malthus, which his opponents have selected as the objects of attack. They have chosen rather to beat their weapons against certain and impregnable facts.

(a) The first of these is the enormous possibilities of the birth rate in the human race. Recent biologic studies have given a tremendous import to the statement made by Franklin and quoted by Malthus, that every species of living creature, plant and animal, produces vastly more offspring than do or could survive during a succession of generations. It is in the opportunity for selection thus presented that the evolutionists see the cause of progress in organic life. Moreover, if the birth rate were only sufficient to maintain a stationary population in one set of circumstances, a slight unfavorable change in the conditions would cause the extinction of the species. This factor of safety, so to speak, must always be present, and in fact, as Malthus saw, the physiologically possible rate is enormously greater than the realized one. Such as Malthus, Moller, Doubleday, and Spencer, who arguing that for

various reasons the physiologically potential birth rate will soon decline until the balance of births and deaths will be automatically maintained, appeal to some sound facts, but they vastly overestimate the importance of them in the practical problem. The error is great in supposing that the institutional and volitional control of the birth rate will cease to be practically the one of the greatest social significance.

(b) If in the case of the birth rate the actual falls far short of the physiologically possible, in the case of the death rate the actual is considerably in excess of the physiologically necessary. Malthus no doubt assigns to this fact an exaggerated importance, but, justly estimated, its importance is still considerable. In large classes of the population, to some extent in every class, the death rate exceeds that which would occur with sufficient food, proper conditions of life, and good sanitation. The progress of hygienic science itself would, with a stationary birth rate, result in a great increase of population. Indeed the phenomenon of a decrease both of the birth rate and death rate while population still increases, is the familiar fact of recent vital statistics. On the other hand, it will always be true that in any given set of circumstances an increase of the birth rate will be followed by somewhat increased mortality. From this fact, however, Malthus draws unwarranted and sweeping conclusions.

(c) Another great fact to which Malthus appealed was that the capacity of the soil in food production is limited. The complexity of the productive process in modern society makes much less clear, but can not conceal, the fact that there exists some relationship more or less immediate between the fertility of land and the number of inhabitants it can support in comfort. The mercantilist views, still prevalent when Malthus wrote, were the exaggerated expression of a complementary truth. Those who have attempted to deny "diminishing returns in agriculture" have reached such absurd conclusions that they have added much to the renown of Malthus. Malthus himself, as above shown,¹ applied but lamely in his Essay the "law of diminishing returns," though he developed it more consistently

¹ Criticism No. 1.

in his other writings. It will ultimately be recognized that instead of being a law peculiar to agricultural production, arising out of the nature of land, this is only a special case of the universal law of economic production; the factors must be combined in certain proportions to produce the maximum result. On this firm foundation it is beyond controversy.

No further reasons are needed to account for the wide vogue which the doctrine of Malthus has enjoyed despite its theoretic weakness. His championing of individualism, his plausible and popular explanation of poverty, the central place the doctrine took in economic theory, the seductive ambiguity of his language, the eternal biologic and physical facts to which he appealed, these are reasons enough. To estimate justly the services of this Essay to economic science is not easy. It seems safe now, however, to say they have been greatly exaggerated; that not only did the teachings of Malthus, more than anything else, give to economics the false sombre hue which it had for many decades, but that they sent the discussions on wages, rent, and interest, and on the nature of economic progress, off on false paths which only lately have begun to be retraced. The practical service done by Malthus in the part he had in the reform of the poor laws is far greater than the merit of his "principle of population" considered as a theoretical economic proposition.

In fact it is evident one hundred years after Malthus that such a thing as a "principle of population" in any tenable sense of the phrase is a chimera. The problem of the relations of the number of people and their welfare to the material environment is much too complex ever to be expressed by any single principle or even single paragraph. A doctrine, or body of generalizations on the subject, which will contain all the truths that Malthus saw while avoiding his errors, is not only possible but has been gradually evolving. Too much of the current discussion of the subject still is in the nature of the old fallacious answers to Malthusian riddles, or is treadmill reiteration of the worn-out phrases. Meantime the evolution doctrine advances, in the biologic and psychological sciences, juster views of economic motives and the nature of economic consumption,

broader studies of the growth of social institutions, exacter statistics from widely separated fields, have placed the subject of population in an entirely different perspective. A true doctrine of population, taking account of all these factors, will in turn throw light on every other problem connected with the well-being of man upon this earth. The gentle, just, and truth-loving spirit of Malthus must, if he still interests himself in mundane problems, view with satisfaction the progress that has been made in the last quarter of a century toward sounder conceptions on this subject to which, a hundred years ago, he gave such prominence in economic discussion. The next few years should see an end of a century of word-quibbling debate. It should see a recognition of the errors of Malthus and of the eternal significance of some of the things he contended for. Practical problems of the highest importance, connected with the doctrine of population, await the attention of the sociologist and the statesman. The degeneration of the race and the depopulation of the superior classes are becoming more serious threats to civilization than was the excessive growth of numbers among the poor of England, which in large part was responsible for the remarkable Essay of Robert Malthus.

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THE ECONOMIC DEVELOPMENT OF THE ISLAND OF CUBA.

THE attention of Europe and America is naturally drawn to Cuba, not only on account of the Cuban revolution, but also because of the important position it occupies in the world market. It is believed that the old regime in Europe, in view of the revolution, is not sound. The economic position of Cuba, on the other hand, will remain and the competition between the two countries will be the present sugar crisis. Cuba is now a great power, which should attract immense interest and much investigation. One of the great agricultural exports of the country has been between beet and cane sugar. Under a system of protection and bonuses which the government has given her, the beet industry has far surpassed the limits of natural production in Europe. The United States, in 1899, attempted to lower this industry, but since the Wilson Act of 1894 it has been left to the mercy and of State bonuses. Havana has been able, of late, to rival the production of Louisiana, and under annexation will increase her output to a much larger figure. The consumption of sugar has been steadily increasing, but a world stock of over a million tons has been left annually in the last few years. When Cuban sugar is again placed on the markets, not only will its competition affect the beet industry, but a more severe conflict will ensue between the different sources of cane supply. Cuba, free or annexed, is the coming competitor to be feared.

It is necessary to discuss the conditions under which Cuba has been hampered in the past before any just estimate can be given of her future possibilities. In 1882 Cuba was just recovering from the effects of the revolution of 1868. The sugar industry increased rapidly under the more liberal policy adopted at that time to pacify the island. A succession of treaties also did much to improve her condition. In spite of the adherence of Spain to the old mercantile policy the island was in a prosperous condition; but Spain proved herself both

avaricious and shortsighted and fastened on Cuba by the law of "commercial relations" a system of economic extortion. A heavy export duty of \$6 was levied on each hogshead of sugar in addition to the internal taxes, which fell on the sugar plantations. Besides these burdens, extra charges were exacted by the transportation monopolies, for carrying, storing, carting, and loading on vessels. It is estimated that the taxes on sugar were equal to 143% of its value. They imposed an extra burden on the planter at an unfortunate period of transition. Every change from slave to free labor has been attended with certain evils rising from a forced re-adjustment. The smaller planters began to abandon their estates. Taxation and debt ruined many who possessed large and fertile fields. The Consul at Matanzas, in 1883, reported that brigandage was beginning to appear and threatened to increase as poverty spread among the proletarian class.

The Cuban tariff raised the cost of living and production for the sugar planter. In 1884, J. W. Foster, then Minister to Madrid, worked out some comparative statistics of cost, which are interesting in this connection. The price of 100 lbs. of flour, quoted in gold, was \$3 in Louisiana, or 42 lbs. of sugar; in Demerara \$3.50, or 87 lbs. of sugar; while Cuba paid \$8, or 238 lbs. of sugar. The price of meat per pound was 8 cents in the first two, but 11 cents in Cuba. Labor was at the same price, in gold, for field hands, but the Louisiana planter need only pay 285 lbs. in sugar for what cost his Cuban competitor 571 lbs. A month's wages would buy 666 lbs. of flour or 250 lbs. of meat for the American laborer, while the Cuban laborer could only get 250 lbs. of flour or 181 lbs. of meat. Other statistics of the necessities of life compare very closely with the same ratio. The only class to escape this burden were the very lowest, who lived in rude huts and subsisted on almost nothing. The value of 2,500 lbs. of cane was \$6.10. The cost of production amounted to \$5.97, leaving only a net profit of 13 cents. Those who were able hired Chinese laborers who did all the work and received 2 out of 3 hogsheads of sugar and molasses at the end of their contract. This was an increase of 50% in profit over slave labor. Production began to fall off, however,

per lb. in Spanish gold. Some of the mills ceased to grind. In the face of two hostile tariffs, which checked both imports and exports, and thrown back on a system that sapped the very means by which the Cubans could have paid their taxes and improved their condition, it is no wonder that bounty-fed sugar brought ruin to the marginal producers. C. Alexander Harris, in an able article on the economic aspects of the insurrection, which appeared in the September number of the *Economic Journal* in 1897, has given a clear and logical outline of the political and economic causes which led up to the recent revolution. His arguments might have been strengthened still more, if he had laid greater stress on sugar as the fundamental factor. Cuba's railroads, shipping, export and import trade, and a hundred minor industries depend on sugar. The sugar industry is her life-blood, to sap which means universal decay.

The economic effects of the revolution on Cuba's industry and the destruction which has resulted have also been carefully portrayed in the same article, but when Mr. Harris wrote of Cuba's future the Spanish-American embroilment was not then foreseen. He evidently considered that she would still be a Spanish dependency. He has also underestimated her superiority over the other islands of the West Indies. Her future is not linked with her sister isles. When one considers the crises through which they have passed without check or oppression, while Cuba, trammelled though she was, has far surpassed them in prosperity, the conclusion is evident.

Before entering into the discussion of the effect of freeing Cuban sugar, an exact idea of the changes which her condition has caused in the world market and in the sources of sugar supply must be gained. Who have benefited by the checking of her million tons? The island sources of supply have not gained much, as statistics show. Both Hawaii and Louisiana have increased their output, but not much more than the increase of consumption has demanded. European beet sugar immediately filled the gap. The "well-organized industries" of the Continent grasped the opportunity to get rid of their surplus product and invaded our market. They also increased their output by almost the same amount that Cuba had formerly

producer. The American beet industry was able not only to survive after the repeal of the McKinley bounty, but to grow steadily. The world stock in 1897, was 1.8 million tons of sugar cane, whose intensity has not been well defined is pending. In Germany, land has been utilized for beet production which otherwise would not be used. In almost all the countries the margin of cultivation has been extended far beyond the limit that natural conditions would allow. The revolution in Cuba merely placed the day of reckoning a little farther in the future. The bounty war has grown more intense with the nearer states market as a prize. Belgium and Holland have again been drawn into the conflict. Austria, in spite of her experience in 1876, has raised her bounties to meet those of Germany, while France has recently added a direct bounty to her indirect aid. The European countries would gladly get rid of their bounty troubles through an international agreement, if they were sure the other countries would keep faith. Their experience in the past, however, does not seem to warrant it. They have been afraid individually to give up the system for fear of the acute industrial crisis which would follow. They have welcomed any disaster or check to any source of sugar supply. A Cuban insurrection was even better than Cuba under Spanish shackles. The intervention of the United States has been viewed with anything but favor. That Cuba should be free is a bitter pill for the European beet protectionist to swallow. This may in part explain the feeling which has been evinced of late.

Again issue must be taken with the statement, which Harris makes, that "Cuba will be crippled for many years to come." If she were left under Spanish rule no doubt this would be true, but free Cuba presents too lucrative a field for both British and American capital. The rapidity with which she will respond to this influx of capital will be marvelous. The fertility of her soil is unsurpassed. Fertilizers have been seldom used except in the case of tobacco. The consuls report that the sugar fields have been used yearly for centuries and that their capabilities are only in the experimental stage. Before the era of improvement labor-saving machines were adopted slowly.

The lands were thinly plowed and there was little use of improved machinery. Even after beet sugar had forced the Cuban planter to adopt new methods and improved machinery it is interesting to note the report from Matanzas in 1893, that the soil was so fertile that it had not occurred to the planters to use electricity in agriculture. The *London Economist*, in the November supplement of 1889, states that it is worthy of notice that Spain has continued to levy an export duty on sugar in the most critical period of its competition with bounty-fed sugar. Under a better system of central factories the cane industry rapidly increased, but reached its greatest height in the reciprocity period. It has responded to every impetus that improvements or freedom of trade have offered. If no insurrection had taken place the better situated factories and estates would have been in working order to-day, and the total sugar production would not have perceptibly fallen. The conditions, however, were exterminating the smaller man. It was he who led the revolt.

Freedom means not only the release from oppressive taxes, but all the possibilities that money and invention have in store for her. Both the cost of living and production will be lowered when freedom of trade is established between Cuba and her natural market. These are the factors which will aid her to compete successfully against beet sugar. Cuban cane contains a larger percentage of saccharine matter than any other. Under the crushing process only 7% is extracted, while it contains 18% of sugar. Beet contains only 12%, of which 11% is extracted. When science has experimented with cane as it has with beet in Europe, the outlook for Cuban sugar will be very promising. It will take some time for the fields to regain their high state of cultivation, but not as long as Mr. Harris anticipated. Two years of peace will make Cuba a formidable competitor again. The industry will be on an entirely different basis. The grade of sugar will be produced that can best compete against beet sugar. It will not pay to go back to the old grades. As fast as capital comes in, the best machinery will be placed in the planters' hands. That capital will come in rapidly can not be doubted, in view of the fact that it has

invaded Cuba under such unfavorable conditions in the past. The best proof that an immediate recovery is possible and that the sugar industry will far exceed its past rate of production lies in the fact that her record of prosperity is unexampled, when one considers the economic oppression to which she has been subjected. "The removal of every antiquated restriction" will have been accomplished, with the removal of the Spanish flag. This will accompany "the revival of that energy and enlightenment which enabled the Cuban planter to retain his place, in the face of bounty-fed competition."

The future of the sugar industry depends largely on the relations in which Cuba will be placed with the United States after the war. The simplest solution of her sugar problem would be annexation. Under American government and with her market secured to her planters, Cuba's production would easily be doubled in a few years. What would be the result? The importation of European beet sugar would immediately cease. The effect on our own beet industry would be disastrous. It was fostered under bounty aid and has been able to thrive mainly because of the Cuban insurrection. Its advocates admit that, unless a bounty is again afforded by the government, the industry may be entirely destroyed. Such undoubtedly would be the case, if it were forced to compete unprotected against free Cuban sugar. The question whether a bounty would be granted is purely a political one. Both economic reasoning and the conclusions which may be drawn from the experience of Europe are strongly against adopting a system which has been at the root of so many evils. The clamor, which would be raised by the beet party under the above conditions, would probably outweigh any sound arguments that might be advanced. It is unfortunate that the West is the main party concerned. It has been an established policy to silence her demands with some direct aid of this nature. In the case of sugar, however, a bounty could hardly be given to beet, unless its benefits were also afforded to maple and Louisiana cane. The incongruity of fostering our State industries that they might compete successfully against our island territories is easily perceived. How the politician could satisfy the claims of American capital is an interesting problem.

Louisiana cane is not as rich, nor can it be produced as cheaply as Cuban cane. The cost of placing either on the market is nominally the same. The American planter would feel the severity of the competition. His margin of profit would be smaller owing to the extra expense incurred to control his share of the market. The rapid progress which he has been able to make since the war would be retarded. Unless a prohibitive tariff were placed on all other sources of supply, his position might become precarious. With such protection however, the total production of Louisiana sugar would not be curtailed. Hawaii is at a disadvantage. The cost of transportation is a natural obstacle. Her production would suffer as the inevitable result. The United States would be confronted with the same colonial complaints that England was troubled with for over a hundred years. The ghost of the East versus the West India claims could easily be revived. What the effect on American capital invested in Hawaii might be is not a pleasant prospect for those interested to face. The other sugar islands would suffer more acutely. Unless free trade was allowed or aid was given by the home governments ruin would overtake them. The prosperity of the West Indies is gained through the open door of our market.

Independent Cuba would be subject to our tariff and except for her superior soil and cane would be on the same basis as the other islands of the West Indies. Both Louisiana and Hawaii could increase their production in about the same ratio as they have done in the past, though the great advantage of this would fall to the latter. Her output would show an enormous gain in a few years. The increase of cane would still have a depressing effect on our beet industry. It is extremely doubtful if it could exist, except in favorable localities. Its output would be governed by the amount of check which our tariff might place on foreign sugar. It would still be a limited industry, with a very large demand for a bounty. The rate of duties formerly placed on Cuban sugar will not be as great a check, when Cuba is free. The cry would be for higher duties, but two important interests will probably prevent this. Cuba will be open to foreign trade. The United States could not

afford to lose her share in this trade by placing unfavorable rates on her sugar. American capital will soon have a more formidable party to push its claims in Congress than Hawaii has had in the past. The interests of commerce and capital will combine to prevent any increase in the tariff schedule that would be unfavorable to Cuba.

For years the European countries have been getting deeper and deeper into the evils of the bounty system. The enormous growth of the beet industry has deranged industrial conditions and caused many of the agrarian difficulties with which they have been troubled. Their treasuries have been depleted and at times almost all of their sugar taxes have been paid out in bounties. Not only is the taxpayer obliged to make up this deficit, but he must buy sugar at a high price. In spite of all this, the chance to win in the world market has proved too fascinating for them to abandon their present system. All forms of bounties and high duties are an attempt to raise the price of sugar and stimulate its production. Both have been accomplished in these countries, but there has been a fall of price in the world market. The greater the output, the less has been the net yield of the sugar taxes. The gain from the rise of prices goes to the refiner or manufacturer, but such a process eventually impoverishes the country at large. The significant falling off in exports to bounty countries shows that the people are not in a state of natural prosperity. Too much concentration in beet production has laid the foundation for existing and future evils.

The world's stock of sugar reached its largest figure in 1897. If there had been no increase in the Continental industry, the loss of Cuban sugar would have been more than replaced from this surplus. The Cuban war relaxed the tension for a brief period. All entered into this new market with a certain knowledge that Cuba would reclaim it at some time in the future. Recent sugar legislation has been largely prompted by this idea. Each country is fortifying itself against the inevitable disaster. Someone must stop or all must suffer. Too much capital is at stake for any one to give up its industry. Unless all can agree to give up their bounties or restrict their production in pro-

portion, the bounty war will be one of extermination. The evil of the industrial crisis that will result from such a war can hardly be estimated. Even if the burden fall equally on the different countries, the European farmer will pay dearly for enjoying for a season the stolen fruits of war. The loss of capital, the derangement of industry, and the hard times which necessarily must follow will be a heavy cost for the temporary increase in production.

The liberation of Cuba means more than regaining her former condition. It guarantees a steady progress toward a larger industrial and commercial success. The effect of driving beet sugar from our market will be an intensification of the European crisis. It will do more than any other factor to force the bounty countries to a common sense settlement of their sugar problem. The immediate sacrifice of the agricultural and refining class, who have been living far beyond the limits of natural production, would be more than outweighed by the benefits derived by the country at large. The consumption of sugar would immediately increase. Agriculture would be established on a more enduring basis. International trade would be stimulated. Such a condition would relieve the West Indies from their depression. The indirect results are by no means the least important. How far they would extend does not lie within the scope of this article to predict.

The political side of the liberation of Cuba is too closely connected with her economic future to be disregarded. Serious men have doubted whether the Cubans were fitted to govern themselves. They have intimated that an independent government would be a severe check to her progress. One can only surmise as to the ability of her leaders, as they are still untried. Almost any form of government would be more advantageous for the sugar industry than a return to the régime of oppression. The release from the severity of taxation and the opportunity for freedom of trade would more than offset the political objections. The Cuban could hardly be more politically corrupt than the Spanish official has been. Capital at least would remain in the island. The benefit of this can hardly be overestimated. The great check to improvement and to the adoption of new

methods and machinery on the plantations has been the yearly outflow of capital. The Spanish colonial system was one of extraction, leaving almost nothing for the planter to build on for the future. No matter how petty a form of government may be instituted, the chance to use capital freely means steady progress for the sugar planter.

It would be unfortunate if Cuba were left alone to recover from the effects of her devastation. Her best interests demand a protectorate. Good government should be enforced until she is politically and economically established. A protectorate would give a guarantee that would encourage the immediate investment of capital. Intervention has imposed this trust on the United States. The depopulation of the island by war has left still larger opportunities for investment. Under Cuban or American government Spanish capital would largely be withdrawn. The opportunity of buying valuable estates at a low figure presents itself. That a large proportion of the sugar plantations would be under the control of British and American capital, in a few years, is a safe prediction. This is the great surety of Cuba's prosperity.

The jealousy of the Powers at the possibility of our annexing such a valuable sugar island has been evinced in their attitude toward the United States during the present war with Spain. France has been Spain's banker for so long, that the loss of Cuba means the cutting off of her most valuable security. It is perfectly natural that she should have supplied Spain with war funds to preserve her kingdom intact. It is altogether probable that she looked forward to Cuba being ceded to her, in case of Spain's bankruptcy. Germany has had the colonial fever for some time. The possession of Cuba by the United States would be a serious check to her aspirations in the Western world. Her sugar interests will suffer severely from Cuban liberation. All the European Powers view with disfavor any increase in our commerce that means a diminution in their export trade. The liberation of Cuba would close our market to their sugar and precipitate a crisis.

Cuba presents both an economic and political problem. What stage of progress freedom will lead her to remains for the

future to disclose. Reasoning from past conditions to coming opportunities gives a substantial hope of steady growth. Her liberation will strongly influence the great channels of trade. Our industries will soon feel the effects of her regeneration. If independent, her export and import trade will become a political issue. Beet sugar will demand protection against her, while manufacturers and capitalists will insist on free trade. If annexed, complications would arise between the different cane interests. The European sugar industry is the most interested party, as the United States market is essential to its present rate of production. Cuba, to-day, assumes the leading role on the world stage.

G. KINGSLEY OLMSTED.

NOTE. The author desires to acknowledge his obligation to the British and American Consular Reports, for the facts made use of in preparing this article.

LABOR CRISES AND THEIR PERIODS IN THE UNITED STATES.

THE quantitative study of labor questions is a comparatively new department of economic science. Most of the literature with regard to the subject has either confined itself to generalities, or it has been of the anecdotal or biographical character. We have had interesting accounts of the various movements of the century in which the feelings and aims of the chief actors have played a prominent part, but little effort has thus far been made to reduce these movements to any law or to get really scientific generalizations which shall be as distinct from the personality of the persons concerned as the scientific generalizations of medical men are distinct from the sufferings, the hopes, the bereavements of their patients. This article is an attempt to frame some generalizations with regard to one particular phase of the labor movement. It is based upon material covering but a limited field and a limited period. Its conclusions do not, therefore, claim to be more than tentative. Later investigations are quite likely to modify them in many particulars. The author believes, however, that the method which he follows is sufficiently promising to be worth trying, even with scanty statistical material.

It would be desirable to extend this investigation to other countries besides the United States, but a brief survey of what has been done abroad will show at once the insufficiency of our data.

In 1880 Mr. Bevan read an excellent paper before the Royal Statistical Society on the strikes of the previous ten years, but it is significant that he felt called upon to apologize for taking up the time of the Society with such an uninteresting subject. That his apology was not superfluous may be inferred from the fact that from that time to the present he has found no imitators in the Society, and that strike statistics are barely alluded to in its publications. It is to be regretted that Mr. Bevan did not continue his investigations so as to connect with

those of the English Department of Labor, which did not begin until 1888, for then we might have a series of figures for England extending over a quarter of a century. The French Department of Statistics has published figures running back to 1856, but for all of the earlier years these statistics are obviously *ex post facto* and cannot be relied upon. The Prussian government undertook such an investigation in 1864, when the question of repealing the law against combinations arose, and it published figures covering nineteen years.¹ But how valuable these figures are may be judged from the fact that only forty-four labor disturbances were enumerated in nineteen years. It was not until 1890 that the Imperial Department of Labor undertook to keep contemporaneous and careful records of strikes.

The result is that the figures published by our Federal Department of Labor in its Reports of 1887 and 1896, which together cover the years 1881-1894, are the most complete figures that we have dealing with this subject in any country.

And yet these disturbances are of sufficient magnitude to warrant us in giving them as close and painstaking a study as has been given to commercial crises.

During the thirteen and one-half years for which our Federal Department of Labor furnishes exact statistics, the loss of wages alone to wage-earners through strikes and lockouts was \$190,000,000, or an average of \$14,000,000 a year. The loss to employers was estimated at \$94,000,000, or an average of about \$7,000,000 a year, and these figures do not include the incidental losses due to violence, destruction of property, additional police expense, cost of militia, legal expenses, etc. That these are considerable may be seen from the fact that the Chicago strike of 1894 cost the railroad companies in destruction of property \$685,308, and in loss of earnings \$4,672,916. In addition to this, the community was put to the expense of arresting over five hundred persons, and imprisoning many of them, and of supporting the State militia and extra police in order to maintain the peace, to say nothing of the loss of twelve human lives during the disturbance. The net loss caused by

¹ Oldenburg, in Schmoller's *Jahrbücher* for 1886, No. 1.

commercial failures in the one year 1894, i. e., the excess of liabilities over assets, was about \$57,000,000, so that the average annual loss during thirteen and one-half years directly attributable to strikes and lockouts was more than a third of the loss due to commercial failures in what was a fairly normal year. If we compare with this the actual loss in that same year through strikes and lockouts, it was \$28,600,000 in the first six months alone, or considerably more than half the loss due to commercial failures in the whole year. It is quite obvious therefore that we have in labor disturbances a very serious source of industrial loss, even compared with that which comes from commercial failures.

We also have a disturbance of industrial activity which, in proportion to those working for wages in the industries concerned, is even greater than the proportion of commercial failures to those engaged in business. It is, of course, difficult to make an exact comparison between things which are so different, but it is not uninformative to state that in 1894 the number of those who failed in business represented 1.2% of those who were engaged in business. If we take the number of persons working for wages in industrial pursuits in 1890 as roughly representing the average for the eight years, 1886-1894, we can set down the number as about 5,000,000. This number includes those given by the census as working for wages for railroads and manufacturing establishments, who may be taken to roughly represent the class subject to strikes and lockouts. The number of those striking in 1886 was 508,000, and in the first half of 1894, 482,000. In the former year, therefore, probably more than one-tenth, in the first half of 1894 alone somewhat less than one-tenth of the possible strikers were engaged in some kind of a disturbance. These figures, rough and approximate as they are, bring out two things very clearly: first, that labor disturbances occasion a very serious loss even compared with commercial failures; and secondly, that in proportion to the number of possible sufferers, they reach a much larger percentage than is reached by commercial failures.

we now consider what I shall call the labor crisis, and we can establish any such sequence of cause and effect or

any such regularity as to enable us to lay down a law of labor crises, first, however, referring briefly by way of introduction to its prototype in the commercial world.

For nearly two centuries the commercial world has been familiar with the recurrence from time to time of certain disturbances known as commercial crises. The acute stage of such a crisis is often called a panic. When they first occurred, as in the case of the South Sea Bubble in 1720, and the collapse of the system of Law in the same year, they were extremely severe and regarded as altogether exceptional. But just as comets were in the early days thought to be special signs set in the heavens in order to warn mankind of impending events, but were afterwards discovered to have an orbit similar to that of the planets, excepting that their periods were longer, so commercial crises have been found during the present century to recur with a certain amount of regularity. Few of them are probably as severe as the first ones that occurred, but they are more systematic. They have passed from the acute stage to the chronic, and while they do not recur as regularly as the annual disturbances caused by the gathering of the crops or the periodic stoppage of trades working by the season, there is a certain rough rhythm in their recurrence, if we consider sufficiently long periods. The simile which I have just borrowed from astronomy is not as far fetched as it might at first sight appear, for an eminent economist has brought our commercial crises into a direct causal relation with astronomic phenomena. I refer to the well known sun-spot theory of Jevons, who found that the periods of commercial crises correspond very closely with the sun-spot periods, and who held that the sun-spots indirectly caused the crises by affecting the meteorology of the earth and therefore the crops, and thus causing disturbances in one of the most important branches of production throughout the world. Few people hold this theory now, but the periodicity is recognized, and economists are pretty well agreed upon the general phenomena of the cycle through which trade passes.

A characteristic feature of the commercial crisis is the breakdown of the machinery of credit which in normal times

keeps the different departments of production in harmony with each other. We find classes of people anxious to produce and anxious to exchange their products for the products of other people; on the other hand, we find people anxious to produce what the first set wish to consume and to consume what the first set wish to produce, but there is no exchange because the machinery of exchange has ceased to operate. The middlemen are afraid to buy the products of each for fear they will not be able to sell them. The condition is like that of two towns connected by a highway which is temporarily washed away by a flood. Both suffer for the lack of means of exchange.

In such a crisis the lines of cleavage are vertical; one producing group is separated from another producing group. But within each of these groups there are horizontal lines of division which separate the employer or manager from the wage-receiver, and bring about what is popularly, though fallaciously, called the contest between capital and labor. The peculiarity of the wage contract is, as Prof. Clark puts it, that the employer buys out his partners. He agrees to pay certain wages on the expectation, which is not always realized, that he will be able, from the selling price of the goods or services produced, to make up what he has advanced and something more which he retains as his profit and as the remuneration for his own work of management and risk. If he is disappointed in his expectations, he must do one of two things, either stop producing, or resort to some method of diminishing the cost of production, such as cutting wages, increasing the hours, economizing the use of labor or material, or introducing new methods. This process almost always involves an injury to the wage-receivers. If they refuse to accept his efforts at economy, they go on strike, and the enterprise is stopped altogether. If strikes become general, we have a condition of things similar to that which exists in a commercial crisis, namely, a group of people anxious to render services in return for wages, and another group of people anxious to obtain those services and pay for them, but a failure to make the exchange on account of the difficulty of agreeing upon the terms. In its acute stage this condition of things may assume the features of a panic, when laborers strike or employers estab-

lish a lockout, not in order to accomplish a definite end in their own business, but either to accomplish an indirect result, or simply to relieve an overwrought condition of the emotions. We then have what is aptly called the sympathetic strike or the boycotting strike. In this case, as in the case of the commercial panic, we not only have a stoppage of certain exchange transactions, but we have with them an emotional element which aggravates the disease.

The labor crisis differs from the commercial in several particulars.

1. The line of cleavage is horizontal instead of vertical.

2. The immediate cause is not as a rule the break-down of credit, though this is often a remote cause, but it is either a disagreement about wages or hours or it is personal in its nature. Strikes often originate from dissatisfaction with regulations, dislike of a foreman, faults of temperament on the part of the employer or the employed, and they are quite as likely to be occasioned by prosperity as by adversity.

3. When the acute stage is reached, it shows itself, not in an unreasoning anxiety to sell securities, but in an unreasoning readiness to stop work, and is often accompanied by violence and murder.

Several years in our recent history stand out in the memory of contemporaries, such as 1877, 1886 and 1894, as periods of peculiar disturbance, but when we try to compare one year with another throughout a long period, in order to obtain some test of the severity of the disturbance, it is not easy to find an infallible criterion. In the case of a commercial crisis the statistics of commercial failures give us a fairly accurate gauge. In the case of the labor crisis we might perhaps take the number of strikes reported from year to year as the best indication of the severity of the disturbance. But the difficulty is that the number of strikes does not always indicate the number of establishments concerned; one strike, for instance, may be ordered in ten or twenty manufacturing concerns, involving a wholesale cessation of production, yet in the general statistics of strikes it will count for no more than a strike ordered in a single establishment. Again, even if we take the number of

establishments involved, some are large and some are small. A strike in a concern employing a thousand hands may not indicate a disturbance ten times as serious as one in a concern employing a hundred hands, but it certainly is more serious, and should not be counted as equal. Then again the strikes are always credited, or debited perhaps we should say, to the year in which they begin; a strike beginning in December, '96, therefore, and running through to March, '97, would be credited to the year 1896.

If instead of taking the number of strikes as our gauge we take the number of strikers, we have perhaps a better guide. If in one year 10,000 people were on strike in a hundred establishments, and the following year 20,000 were on strike in the same number of establishments, the disturbance in the second year would certainly be more serious than in the first, other things being equal. But here we meet with a new difficulty. Other things are not equal. It may be that the 20,000 who struck in the second year were out only for a week, while the 10,000 who struck in the first year were out for three months. Most people would in that case agree that the year in which 10,000 struck was a worse year than the one in which 20,000 struck, for the loss to the employees would be greater, presumably also the loss to the employers, and the duration of the strike would indicate an amount of tenacity due probably to a great deal of ill will on one side or the other.

This might lead us to find refuge in the figures giving the loss of wages, and such figures are published by the Department of Labor, but here a new difficulty confronts us. A hundred men earning an average of \$1 per day and striking for one month would sacrifice just one-third as much as the same number of men earning \$3 per day and striking for the same length of time. Would it be fair to assume that the second strike was three times as serious as the first? Would it be fair to assume that it was not less serious? In these figures we have, it will be noticed, not a case of *damnum emergens*, as in the case of the losses due to commercial failures, but of *lucrum cessans*. Now while the loss of possible earnings in the case of the well paid laborer is greater than in the case of the poorly paid man, the

mere fact that he earns more is a presumption that he has larger resources in the way of savings, so that a strike of a certain duration really causes him less hardship, to say nothing of the aid which he is more apt to receive from his union. The highly paid laborer being, moreover, more apt to be organized and confident of his strength, is perhaps more apt to strike with a comparatively slight provocation. On this point there is room for a difference of opinion, but enough has been said to show that the amount lost by the wage-receivers is an unsafe indication of the seriousness of a labor crisis. The fact is that no single series of figures seems to give us just what we want.

If the labor department published them, the figures showing the number of labor days lost in the aggregate would probably be the best single index of the severity of a strike, because those figures would combine the number of people out of employment with the duration of the strike, but those figures unfortunately are not given by the reports. I have therefore resorted to an artificial gauge, taking for each year the number of persons striking and multiplying that by the average duration of each strike. If each of the strikes involved exactly the same number of men, this would give us what we are looking for, namely, the number of days lost by strikes in the aggregate; but inasmuch as the short strikes may involve a large number of men, and the long strikes a small number, we cannot be confident that the product will indicate the number of days lost. Our index number is, therefore, a purely artificial figure, but it has the advantage of combining two of the most essential elements in labor crises, namely, the number of people who stop work and the length of time during which work is stopped in the average strike. The lockout must also be taken into consideration. Indeed the dividing line between the two is often a difficult one to establish, and is disputed. Men who want to strike may perhaps force their employer to lock them out in order to put the responsibility for the disturbance upon him, and the difference between the two is simply that in one case the wage-receivers take the initiative in order to gain a point, and in the other, the employer. Lockouts are on the whole much less numerous than strikes and involve less loss, but to

get a figure showing as completely as possible the intensity of labor crises, I have multiplied the number of strikes for each year with the average duration of the strike; I have likewise multiplied the number of persons locked out with the average duration of the lockout, and by adding these two products together, have obtained an index number for the years 1881 to 1894, the only years for which we have detailed figures in the reports of the Labor Department. For the earlier period we must fall back upon the rougher indications which history gives us. Let us first, therefore, look at the general features only of the whole period from 1827 to 1894, and then examine in more detail the latter part of that period.

Well-defined commercial crises occurred in the United States in the years 1819, 1837, 1839, 1857, 1873, 1884 and 1893. The earlier labor crises cannot be fixed so confidently. There is no doubt that there was a great deal of agitation in the ranks of labor during the years 1834-35. There was also considerable agitation in the years 1847, 1848 and 1850. The facts at our command are not sufficient to indicate whether there was what could properly be called a labor crisis during that period, but a great many powerful unions were formed shortly after 1850, and there were many strikes at that time. In the years 1858, 1859 and 1860, we have more definite evidence of a number of strikes inaugurated in order to restore wages after the reduction of prices which occurred in 1857. In the years 1862 and 1863 there were many strikes for an increase of wages on account of the inflated prices of the war. Well-defined labor crises occurred in 1877, in 1886 and in 1894. Our evidence does not show whether or not there was any connection between the labor disturbances of 1834 and 1835 and commercial disturbances. The movements from 1858-1860 did, however, stand in a direct causal relation to the crisis of 1857. In 1877 the most notable feature was the strike on the Pennsylvania Railroad system, with rioting and bloodshed at Pittsburgh. This strike was precipitated by the reduction of wages made by the Pennsylvania Railroad and by the order of that company to run what were called *double-headers*, long trains of cars with two locomotives, requiring one half the number of conductors and train hands

that two trains would have required. This order was caused by the falling off of traffic due to the commercial crisis of 1873 and had been preceded by a general reduction of wages. The most violent outbreaks in 1886 center about the Texas Pacific Railway, which had failed and was in the hands of a receiver, and were also due to a reduction of wages following the commercial crisis of 1884. Finally the great Chicago strike of 1894 was precipitated by a reduction of wages in the car manufacturing departments of the Pullman Co., and this was caused by the falling off in prices consequent upon the commercial crisis of 1893. In the case, therefore, of four such crises we can trace a very direct connection between the commercial crisis and the labor crisis.

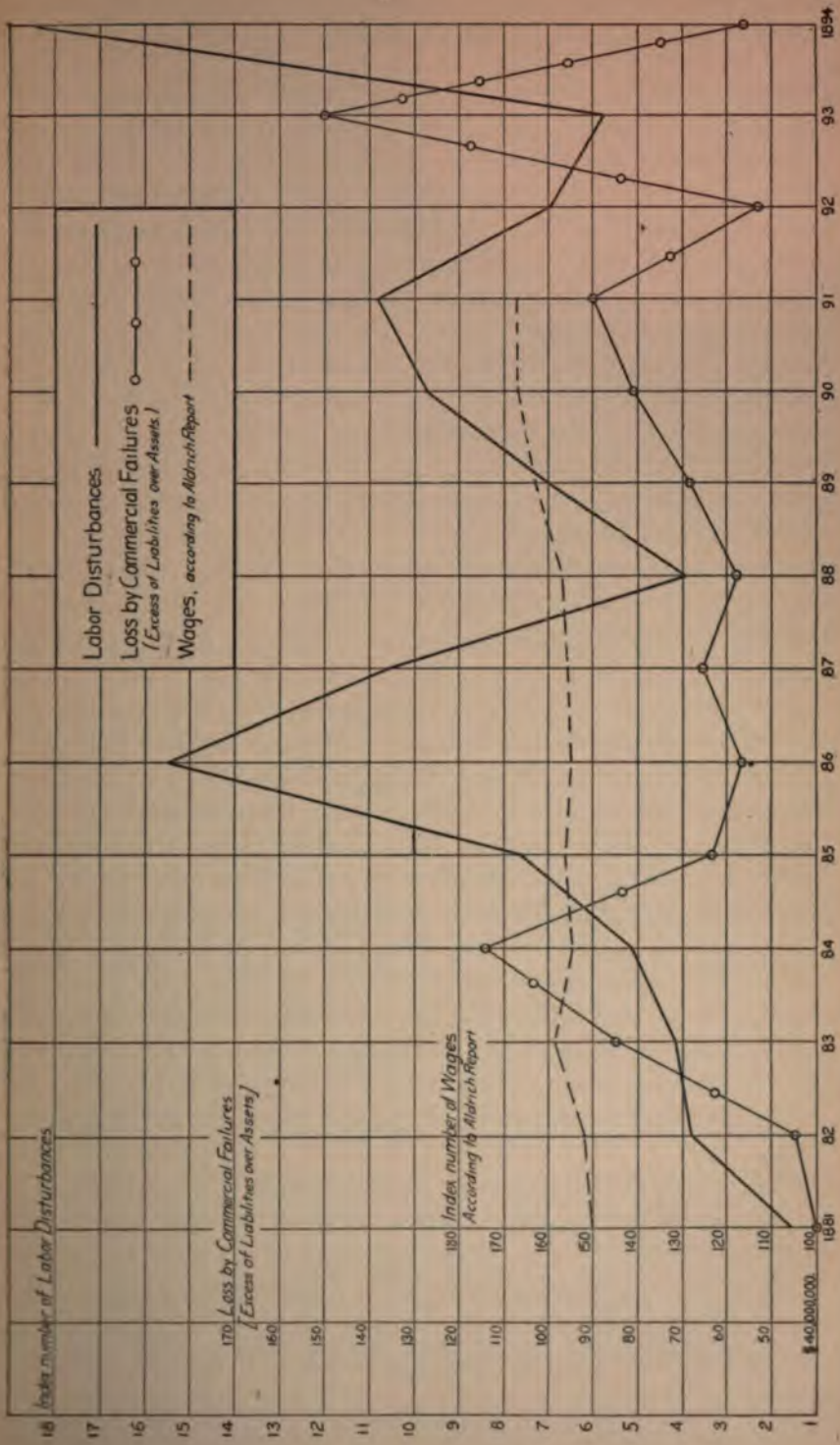
If we look with more care at the diagram on page 191, we find that the parallelism extends even further. Not only is there a correspondence between the maxima of commercial failures and of strikes in the diagram, but there is also a fairly close correspondence between the lines in the intervals. The smaller maxima of commercial failures correspond fairly well with the smaller maxima of labor disturbances. We might be inclined, if we looked simply at these facts, to infer that the commercial crisis was the direct cause of the labor crisis, and that when a commercial failure led employers to economize, this produced strikes and difficulties. It can be shown that on three occasions some of the most prominent strikes were directly caused by such an attempt at economy. But closer study into the valuable and detailed statistics collected by the Department of Labor requires us to materially modify this hypothesis. For if we look into the question of causes we shall find that the full figures do not warrant such a generalization.

The study of these causes is, to be sure, beset with many difficulties. No less than 574 different causes are enumerated in the tables printed in the last report, and these are of the most varied nature. Often two or more causes are combined in a strike and it is very common to find strikes caused by what at first sight seem to be contradictory reasons. Nevertheless it does not seem hopeless to get some generalizations out of this mass of details. For it appears that, numerous as these causes

are, the seventeen leading causes supplied in the first enumeration over ninety per cent. of the totals and in the second enumeration eighty-one per cent. (Report for 1894, page 29.) Of these seventeen, again, there were three or four which far outranked all the others. And finally, by grouping the minor causes with these greater ones according to certain fundamental characteristics, we can reduce a very complex picture to a comparatively simple one.

In order to accomplish this I have first of all added together for each year those causes which involve a desire for a betterment in the condition of the laborer, such as larger pay or shorter hours, or lower prices for materials used, or some other advantage. In the second group I have placed all those which involve resistance to an attempt at economy on the part of the employer. The principal of these is a reduction of wages or an increase in the hours, but numerous minor causes group themselves under this one head. In the third class I have put the sympathetic strike, and in the fourth miscellaneous causes. The most important of these miscellaneous causes is usually a demand for recognition of the union or something similar, and while there are sporadic cases which cannot come fairly under this head, we shall not be far from the truth in assuming that most of these miscellaneous causes involve a demand for power, rather than a demand for a direct pecuniary advantage or a resistance to a direct pecuniary loss. I have given a special place to the sympathetic strike on account of its growing importance in recent times.

Now if we look at these causes as tabulated on page 193, we shall find that, taking the whole period together from 1881 to 1894, a large majority of strikes involve a demand for better terms on the part of the men rather than a resistance to economies. In the crisis year 1886, out of a total of 9,861, 8,251 involved a demand for an increase in wages, a reduction of hours, or something similar, and only 427 involved a resistance to economies. In the crisis year 1894, there was a decided falling off as compared with previous years in the strikes caused by a demand for better terms, the number having fallen from 4,138 in 1887 to 661 in 1894. There had also been an increase



in the number of strikes caused by a resistance to economies, this number being 895 as compared with 571 in 1887. This year was also the only one of the series in which the strikes caused by a demand for better terms were less numerous than those caused by a resistance to economies, but in that same year we find sympathetic strikes assuming large proportions, there being no less than 1,507, while the strikes caused by miscellaneous motives rose to 2,191. So that, even in that year directly following the commercial crisis, the number of strikes caused by a resistance to economies numbered only a little more than one-sixth of the total number of strikes. The figures, therefore, do not show that in the years of crisis thus far investigated the principal or even a very important cause of the strikes was to be found in a cutting down of expenses by the employers. It is true that in some cases the demand for an advance in wages may simply be a demand for the restoration of wages recently reduced. But our statistics do not enable us to trace such cases.

Another curious fact follows from the figures. Not only have the strikes which aimed at resisting economies had less chance, on the average, of success than those which aimed to secure advantages, but their lack of success has been conspicuous in the years of crisis. In 1894 about two-thirds of the strikes caused by a demand for higher wages succeeded more or less, while more than two-thirds of those caused by a resistance to economies failed completely. These figures indicate that we are dealing with a phenomenon which has not a single but several causes, and that, while the economies necessitated by a commercial crisis cause a part of the strikes, and have been conspicuous in some very notable cases involving riot and violence, taking the strikes altogether, they play a comparatively small part.

This can best be explained on the theory that during the period investigated there were certain tendencies which operated steadily to improve the condition of the laboring man. Whether these were general economic causes, such as increased control of man over nature due to improved processes, new discoveries, etc., or whether they were due to the direct efforts

TABLE SHOWING THE RESULT OF STRIKES IN THE UNITED STATES, GROUPED ACCORDING TO THEIR GENERAL MOTIVES. THE UNIT IS THE ESTABLISHMENT.

YEAR.	FOR DIRECT ADVANTAGES.				AGAINST ECONOMIES.				FROM SYMPATHY.				ALL OTHER CAUSES.				TOTAL.			
	Whole Num-ber.	Suc-cess.	Partial Suc-cess.	Fail-ure.	Whole Num-ber.	Suc-cess.	Partial Suc-cess.	Fail-ure.	Whole Num-ber.	Suc-cess.	Partial Suc-cess.	Fail-ure.	Whole Num-ber.	Suc-cess.	Partial Suc-cess.	Fail-ure.	Whole Num-ber.	Suc-cess.	Partial Suc-cess.	Fail-ure.
1881--	2,661	1,662	108	801	145	69	5	71	3	1	1	1	119	65	1	53	2,928	1,797	205	926
1882--	1,770	1,013	144	613	198	37	26	135	2	1	-----	-----	135	77	2	56	2,105	1,128	172	805
1883--	2,180	1,460	398	322	359	93	45	251	2	1	-----	-----	188	51	1	136	2,759	1,605	444	710
1884--	1,770	1,022	58	690	440	128	32	280	26	-----	-----	26	131	69	2	60	2,367	1,219	92	1,056
1885--	1,466	782	165	519	522	264	50	208	34	7	-----	-----	262	153	2	107	2,284	1,206	217	861
1886--	8,251	2,880	1,774	3,597	4,277	213	11	188	164	57	3	104	1,019	270	86	663	9,861	3,420	1,874	4,552
1887--	4,138	2,199	314	1,625	571	106	49	416	219	22	5	192	1,661	680	106	875	6,589	3,007	474	3,108
1888--	1,857	983	153	721	335	118	24	193	106	19	3	84	1,208	711	12	485	3,500	1,831	192	1,483
1889--	2,211	1,084	467	660	623	152	229	242	87	47	-----	-----	865	477	20	368	3,786	1,760	716	1,310
1890--	6,317	3,626	512	2,179	568	142	253	173	744	307	2	434	1,795	886	177	732	9,424	4,961	944	3,519
1891--	4,999	1,871	508	2,620	413	165	29	219	531	245	34	252	2,173	793	102	1,278	8,116	3,074	673	4,369
1892--	1,181	536	201	444	518	185	10	323	305	144	1	220	3,476	1,313	270	1,593	5,540	2,178	432	2,880
1893--	1,966	1,008	270	687	714	177	76	461	268	59	41	168	1,607	1,071	83	451	4,555	2,315	470	1,767
1894--	661	369	54	238	895	205	51	639	1,507	33	-----	1,474	2,091	621	702	768	5,154	1,228	807	3,119
Total	41,428	20,495	5,216	15,716	16,758	2,054	890	3,799	4,058	943	90	3,024	16,730	7,237	1,566	7,925	68,974	30,729	7,762	30,465

This analysis (compiled from the Third and Tenth Annual Reports of the Commissioner of Labor) shows that during the period from 1881 to 1894 the strikes inaugurated to directly improve the economic condition of the strikers succeeded fully in nearly 50% of the establishments concerned and succeeded more or less in 61%. Those which aimed to resist economies, on the other hand, failed completely in over 50% of the cases and succeeded fully in only 30%. The sympathetic strike failed in over 74% of the establishments.

- a. In 15 establishments the results were not ascertained.
- b. Not including one establishment not reporting.
- c. Including one establishment in which the strike was still pending July 1, 1894.
- d. Including two establishments in which the strike was still pending July 1, 1894.
- e. Including three establishments in which the strike was still pending July 1, 1894.

of the leaders of organized labor, is not easy to decide. The general economic causes are probably the most steady and have tended to raise wages during the period under review. Labor agitation as a cause of strikes operates spasmodically. It will be noticed that the men and the organizations which are prominent in one crisis are seldom prominent in another one. Many people have already forgotten the name of Martin Irons, who played such a part in the disturbance of 1886. Even Powderly has almost passed into history, while I doubt if any reader of the *YALE REVIEW* recalls the name of the leader of the Pittsburgh strike of 1877. Yet for several days Boss Ammon, a brakeman of eleven months experience, successfully ran the Pittsburgh division of the Pittsburgh, Fort Wayne, & Chicago Railroad, and when Gov. Hartranft started back from the West to Pittsburgh in order to try to restore order, Ammon telegraphed him, welcoming him to the State and assuring him a safe passage.¹ The movement of organized labor seems to go through a certain cycle, which, although influenced considerably by outside causes, has also a certain period of its own. If a certain set of men start a successful labor movement, they may carry it on for a time, but entirely apart from the depression produced by hard times, are apt to lose their influence and go out of power, and thus the movement they inaugurated is checked, until a new set of men come to the front to take their places and renew the agitation.

The following may be set forth as a tentative hypothesis based upon the facts considered above. The labor crisis is not the result of a single cause, but depends for its recurrence and its character upon three main forces, two of which may be considered to be cyclical, the third constant. The two former are the commercial crisis and the labor movement. The constant force is the general economic condition of the country. Of these three the commercial crisis is probably the most potent.

In times of general prosperity there is a demand for labor, employment is abundant, and wages tend either to go up, if the general economic tendency is upward, or at least not to go down, if the general economic tendency is downward. If now a

¹ Report of Pittsburgh Riots, 1878, page 22.

commercial crisis occurs, many industrial establishments begin to economize, either by reducing wages, or by running on half time, or by resorting to some other method like that of double-headers, which, while maintaining the rate of wages, reduces the operating expenses by reducing the number of men employed. In all these cases the wage-receivers as a class suffer; the total amount paid in wages is reduced; the natural consequence is resistance, which leads to strikes and lockouts and, in acute cases, to violence.

Independently, however, of the commercial crisis there is a certain cycle in the development of the labor movement. When conditions are fairly prosperous the wage-receivers are apt to organize and to join in unions under energetic and skillful leaders. If anything occurs to produce numerous strikes, a period of quiescence almost inevitably follows, whether the strikes are successful or not. It was found that during the years 1881-1886 the successful strikers required on an average seventy-six days of work to make up for their loss of time when they were idle. In the case of the partial success of the strike it was shown that three hundred and sixty-one days, or more than a whole working year, would have been required. Strikes differ from war in that there is no indemnity, and as a rule no loss of life. Even if the strike is successful, therefore, the wage-receivers require a long period, on an average perhaps three months, to regain the economic position that they had before. In the case of the unsuccessful strikes, which during the period considered constituted about half of the total number, there is nothing to offset the loss, and the leaders are apt to be discredited. After a time the men regain their courage, they accumulate more money, new leaders come to the front, and they are ready for another period of effort.

But the complexion which a labor crisis assumes must always depend upon the general tendency of wages. If the general tendency is upward, then the chances are that strikes will mainly take the form of a demand for increased wages and that such strikes will be on the whole the most sure of success. If the general tendency is downward, we may expect to find the strikes organized to resist a lowering of wages and to meet with

failure. The cycle of labor agitation is partly dependent upon the cycle of commercial crises, but not absolutely. According to various economic, social, or political conditions it may result in bringing the labor crisis nearer to or further from the commercial crisis.

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ANCIENT AND MODERN HINDU GILDS.

II.

FINES, REVENUES, EXPENDITURES.

Fines are imposed for non-observance of the rules of the gild. This is found to apply chiefly to the matter of holidays. Every caste and gild has its stated holidays and any member that keeps open shop or works on such a day is liable to a fine, unless he has bought the privilege. A prime source of revenue in the case of most gilds is the proceeds of the auction sale of this privilege. The fine is heavy for violation of this right on the part of others, and if the offence is repeated the delinquent is sometimes expelled rather summarily. This custom of auctioning off the right of not keeping a holiday is one more common in the smaller towns.

Large gilds get revenue also from purchases of the members, on which a tax is levied. One quarter of one per cent. is the annual impost, but when paid in kind, as is often done, an approximate amount, reckoned roughly according to this ratio, is taken by the gild. Thus from every cart bringing in a load of grain a few handfuls are taken out and cast in a heap at the city-gate. There is no precision; often the cart does not stop at all; the toll-man puts in his hand and takes out a little, not enough to make any appreciable difference in the load, but it adds to the slowly accumulating heap at the gate. The law is strict, but its observance is kept more in the spirit than in the letter of the per cent. It must be remembered that it is all for charity (the funds of the gild are devoted to this object solely), and the exact amount is of small importance. I fancy, however, that the very precise rules in regard to king's toll in the old law-books were probably interpreted much in the same loose way.

When the article taxed is not payable in kind, the tax assumes a more formidable appearance. In Bhaunagar there is such a tax (about ten cents on every bale of cotton) levied by the

manufacturers' gild. So in Borach the Mahájan's chief revenue is said to be from a similar tax on every bale. This is sometimes as high as a quarter of a dollar. All bills of exchange negotiated by a banker are taxed in the same way, the tax in this case being about ten cents.

None of the gilds is a provident institution. Regular banks have done away with their old function of trust companies, and they usually spend their moneys at once, in the case of small gilds on dinner-parties, in the case of Mahájans on Pinjra-pols, asylums for animals and temples. But if there is anything on hand, the moneys are credited to the corporation at the local bank. The large gilds sometimes possess considerable real estate, which has come to them in the shape of gifts, and they are often the beneficiaries of rich members, who give to them in the knowledge that they will expend principal or interest (as desired) for charities. Where there is a loose organization, as in Jeypore, without fees or assessments, money for charity is collected by subscription. In Surát, on the other hand, where the organization is perfect, fees and taxes come in so regularly that the members seldom give directly for any charity.¹

I was told that on an average over fifty per cent. of the whole income of a gild went regularly to charity. The old rule was that the local Pinjra-pol of Ahmedabád, for instance, should receive one quarter of one per cent. on all goods purchased by any member of the gild. This rule is not now so strictly observed, but some gilds, as for example, the gold-thread gild, still hold to this rule. Other gilds spread their charity over more general ground, giving part to one object, part to another. In some cases, again, there is no such tax at all. It is a matter which is decided by each gild for itself annually. Thus the chief confectioner said that in his business a tax was levied on all purchases of sugar and condensed milk, but the amount of the tax and the disposition of the moneys when collected were matters settled by the gild once a year. He asserted too that for the last year the rate had been eight annas on one hundred rupees, but this would be half of one per cent.,

¹ Compare also the *Bombay Gazetteer*, vol. ii. pp. 321, 442.

and some of the other members of the conference looked so astonished at the statement that I came to the conclusion he was exaggerating to give a good opinion of the charitable work of his gild. In the case of the cloth-merchants I was told that one quarter of one per cent. was a fixed amount (not settled annually) deducted for charitable and religious purposes, and that the rest of the money on hand was spent for the gild "at the discretion of the council." The funds are sometimes spent for semi-religious purposes, such as are urged as worthy charities in the ancient texts,—tanks, shade-trees, fountains, rest-houses, etc. Thus at Junagadh the goldsmiths' gild has built a *dharmashāla*, that is a house where pilgrims can be put up over night. There is a fine *dharmashāla* at Jeypore, built in the same way. In small places in Gujarāt all spare funds are usually given to Pinjra-pols by the Shrāvak gilds and to temples by the Vishnuite gilds. I was curious to know what happened with the funds of a mixed gild, and was told that "the amount for each sect is decided upon amicably by the council." When nothing special is required and the Pinjra-pol and temples are in a flourishing condition, there is always the outlet of a dinner-party, so that funds never accumulate. The artizan gilds do not appear to give much in charity, preferring to spend their small income on an annual gild-picnic. I was told that in Surāt the difference is most marked. Here all the Mahājans spend their money on charity and all the artizan-gilds spend their's on picnics. Where, as is often the case in Kathiawar, the caste and gild are identical, these picnics are merely family reunions. Besides the food, new pots and kettles and dishes are bought for each picnic. It is seldom, however, that artizan gilds have any money to spend.¹

¹ Mr. Proctor-Sims, in the *Bombay Gazetteer*, vol. viii. p. 265, mentions as objects of charity, feeding the poor, Pinjra-pols, *dharmashālas*, cattle-troughs, and water-sheds or *paraḥs*. He says that artizan-gilds usually spend all they get for dinners and cooking utensils. This I found to be true everywhere in Gujarāt, but not elsewhere. Curiously enough "feeding the poor" is very rarely claimed as an exercise of gild-charity. Many of the Sheths at the conference said that they never gave gild-money to the poor for food or for anything else, save as the poor benefited by the erection of fountains, etc.

JURISDICTION OF THE GILDS.

To fix trade-holidays, to enforce their observance, and to collect and administer the funds of the gilds are functions to which I have already referred. The right to arbitrate is assumed by all gilds. When a trade-quarrel is referred to a Mahájan or when the Mahájan, without being requested, decides a quarrel, this is the final arbitrament. Refusal to abide by it or indeed to carry-out any decision arrived at (as in the case of payments thus adjudicated) results in ostracism. When a member is thus cut off from the gild he may be ostracized by the caste. In the latter case he becomes a social pariah, more wretched than a village dog. But even if one is only cast out of the gild, one is often, *ipso facto*, out-casted. In the country such an outlaw is debarred from all social recognition. No man will work with him or for him, nor will anyone employ him. In the cities no dealer will serve him, no broker will act for him, no servant will remain in his house. The carpenter, the baker, the confectioner, the blacksmith, the tile-maker, the very potter, lowest of the lowly, refuse to take his orders, deliver goods to him, or perform any service for him at any price. Caste here has yielded entirely to the gild. The rule established by a low-caste corporation may involve such ostracism in the case of the highest caste, but it is enforced regardless of caste. A typical instance is cited by Mr. Proctor-Sims. In 1878 in a small town in Kathiawar the Vania Mahájan levied a religious tax which the traders of the Brahman caste refused to pay. The Vania gild therefore boycotted the Brahman traders and forbade all dealings with them till the high-caste traders yielded and paid the tax.

In small places the Mahájan is thus absolute master of the town. No individual can stand against his local gild; nor where there are several small gilds which form a Mahájan can a whole gild resist the union. Owing to the number of traders and workmen in large towns who do not belong to gilds, the power there is not so great, but it is generally coercive. Thus in Ahmedabád, as I was told, a banker who had his house half-tiled got into a quarrel with a confectioner, and could not

get the other half of his house tiled till the sweetmeat-gild had told the tile-gild that it might resume work for the representative of the bankers' gild.

The artizan-gilds are practically more powerful in this way than are the more aristocratic Mahájans of large cities. For there are a dozen cases where the artizans are able to mar the serenity of a banker's life against one where the banker would be apt to exercise power over the artizan. The whole Ahmedabad conference stated publicly (and different members of the conference assured me privately after the meeting was over) that despite the annoyance, this was "all for the public good." Even the victims regard themselves as martyrs in a good cause, and think themselves protected where they are tyrannized over.

I submitted the following questions to the conference in regard to other matters of jurisdiction: In the case of disbursement of funds, if the gild objects to expenditures proposed by the Sheth and Council, what action is taken? Does the gild alter prices and the rates of wages? Does it decide what shall be the number of working hours? Does it prohibit or give formal sanction to improvements?

In answer to the first question, I was told that "there would probably be no such objection; but if there were, the Sheth would talk with the members of the gild and induce them to change their opinion, or there would be an amicable compromise." The chief question would be whether Shrāvaka funds should all go for Shrāvaka charities. In Ahmedabad itself a normal proportion is observed between Shrāvaka and Vishnuite expenditures, but the exclusive use of sectarian funds for sectarian purposes is not countenanced. In other towns, particularly smaller towns, the latter is the rule.

In regard to prices I was informed that in Mahájans they were regulated only in the grain-gild. In cloth-gilds, for instance, two men of the same gild may sit side by side in the bazar and sell the same kind of cloth at different prices. But wages are fixed by the gild, though in places where modern manufactories are found wages are regulated to a great extent by the action of the factory-owners, who are usually not members of a gild. Both in Gujarát and in Rájputana the mill-owners operate

against the gilds as a general thing, though they are sometimes gild-men.

The method of fixing the rate of wages and keeping it there without protest is very simple. It is the practice to advance a certain sum to every workman at the beginning of his term of service. As his wages give him just enough to live on, he can never save enough to repay the loan, or if he could he is usually so improvident that he does not do so. If he asks for more wages his employer refuses the request. If he says he will leave unless he gets more the employer replies, "Very well; but first pay me what you owe." The result is that the man remains at the old wage. When an employer wants to pay extra wages to induce a special workman to enter his employ, the employer "must ask the gild about it and abide by their decision."

In one form or another the debt-trick is commonly employed. For instance, in the Bombay mills the hands are not paid in advance, but a month in arrears, and during the plague, in order to force them to remain, they were not paid for two months after their wages were due. The effect was the same, for having no money, and their credit being soon exhausted at the grain-merchant's, they had to pawn and borrow of the *marwaris* or money-lenders, and were so much in debt that they could not stop work. So too, even the hotel-servants had their wages held back on the same principle. They would have left Bombay long before the plague became violent, but their wages had been kept back for months and they worked on in the hope of getting enough to pay off their debts. This some of them eventually did, but others died first, which was clear gain to the hotels.

Ordinarily, in a Páñch, price and wages are fixed by the gild and also the number of working-hours. On these points the gilds act in combination and especially combine against outside competition. "The lowest rate allowed by the local gild" may not be altered. If outsiders come in and work for less than this, it is the duty of the members of gilds on which the workmen are dependent to refuse to work for them, or supply them with the means of their trade. Thus if a confectioner should sell sugar-cakes at less than the permitted rate, the gild

that supplied him with sugar would cease to do so; if a tile-maker should work for less wage, the gild supplying his material would boycott him, etc. So in regard to working over-hours; though here there is this license, that if a man wishes to work over-time the gild will not ordinarily object, provided there is enough work for all to do. But otherwise the rule is very strict. When work is scarce a fine is imposed by the gild on anyone that works more than the permitted time.

Incidentally I inquired at this point whether the gilds took cognizance of disputes between employer and employed when the former alleged unsatisfactory work as a reason for dismissing the workman employed. I was told that the gild "took action in regard to every grievance and had jurisdiction over everything." A case 'remembered' was as follows: "Some years ago I (a merchant Sheth) discharged a carpenter who did unsatisfactory work. The carpenter-gild refused to let any workman work on the house till the incompetent carpenter was taken back." I then asked the Sheth whether he considered gilds in general to be advantageous or disadvantageous to the common weal. "They are very advantageous," he replied, "though their action is sometimes open to criticism. In this case I was the sufferer, but the carpenters acted for their own best interests, and they cannot be severely blamed."

The conference denied that the gilds ever exerted themselves actively against modern improvements. A case cited from the beginning of this century (1820, Dunlap, *apud* Lely, p. 111) indicates the spirit of opposition that used to obtain, but though a certain unfriendliness to modern methods was perhaps to be suspected from casual remarks of some of the older members of the conference, I was unable to elicit more than a general statement to the effect that "gilds never object to improvements, but are the first to sanction them," which is doubtless true when the word improvements is defined as it was meant, and may perhaps be a correct statement in any circumstances.

As the gild controls the output of energy in the workman, so it controls the output of the merchant's wares. Whether goods might be sold out of town was a question which the gilds of

Jeypore refused to answer (in view of the famine), but in Ahmedabád the grain-dealers decided it the day before the conference, determining that no grain might be sold out of town. At the same time they raised the price of the chief staple by ordering that only sixteen pounds instead of twenty-four pounds should be sold for a rupee. I may add that though the general Government refuses to regulate trade, it does not prohibit such regulation on the part of the gilds or on the part of local governments. In extra-British territory it is customary. Thus the Nizam of Hyderabad regulated the output of grain during the famine.

Rates of exchange and insurance (in the case of Mahájans) and rates of sale and amount of marketable material which may be made by each artizan, are always settled in advance by the respective gilds.

Despite the fact that the jurisdiction of a gild generally extends over members of other gilds, by virtue of the mutual support given by all such organizations, it not infrequently happens that the gilds quarrel among themselves. There is then no power to adjust the difference and a battle of gilds is fought out, usually by maneuvers rather than by force. A case on record in one of the small towns of Kathiawar is as follows: A sweeper having been insulted by a merchant, got his gild to refuse to sweep for the member of the local Mahájan. The Mahájan promptly got the grain-dealers to refuse to sell grain to the sweepers. When starved the sweepers swept again. In another town the Mahájan objected to the action of the potters, who had raised the price of pots. The potters stood firm and seemed likely to win till the Mahájan bought the right to dig clay in the village lands. They then had the potters at their mercy, and the price of pots resumed its old level.

When the Mahájan is not identical with the village Pancháyat, Elders of the village, the power is divided, and in this case it is doubtful which party will win the war of tricks. But in most villages the Pancháyat consists of members of the Mahájan, when its power is quite absolute. Thus in one town in the north of Kathiawar the Pancháyat thinking that cholera,

which had broken out, was caused by witchcraft, determined to burn all the houses where the magic influence had shown itself. The owners of the houses never thought of resisting the order and the whole plague-district was burned up, without compensation to the owners, at the command of the Pancháyat.

SATTÁS.

Sattás are time-bargains in the grain-market, corresponding to our 'futures.' The grain-gild takes cognizance of these bargains and arbitrates in all disputes arising from them between members. The price of grain is regulated daily by the gild and the assumed value of grain on a given day is fixed in the interest of time-bargains or stock-gambling.

There is another mode of gambling, very popular in northern India, known as Kabálas, or rain-bargains, but these are not recognized by any gild. They are simply a method of betting on the time when rain will fall, 'real rain' being estimated by a continuous flow from a certain house-gutter, which a watchman is stationed to watch. These bets are regularly entered, but they are regarded as private affairs like any gambling bets, and failure to pay such a bet is not officially recognized.¹

GILDS AS COURTS OF LAW.

The reader will have observed that the jurisdiction of the gilds relieves the local courts of a good deal of business. Disputes which in the Occident would be settled by a legal appeal are in the land of gilds settled by the societies of the disputants. In small towns the Mahájan is usually the accepted referee in all petty disputes. In cities, on the other hand, trade disputes are often brought into court only to be referred back by the court to the Mahájan for settlement. This, I was told, is frequently the case in Jeypore and in other cities under native rule.

¹ The Kabálas stand to the Hindu in the place of card-debts or racing-debts, and are so important a vice that in 1897 the Government sought to stop them by law. To this the Hindus of Calcutta retorted that so long as the British were allowed to bet on horses they would claim the right to bet on rain, and I believe the matter was not pressed. There is a description of this fascinating excitement in the *Bombay Gazetteer*, vol. viii. p. 209.

Small gilds, again, are in the habit of appealing to the great gilds, Mahájans, when the former quarrel among themselves. This is particularly true in small places, where the grain-dealers, grocery-dealers, and tobacco-dealers (i. e., the usual Mahájan) stand in social antithesis to the gilds of the petty dealers and common workmen, representing an educated intelligence to which the lowly gilds of the uneducated can and do appeal for arbitration. As far as I could learn, the matters thus brought before the Mahájans are settled fairly and satisfactorily and there is seldom any complaint of injustice. Custom gives force to this arbitrament and appeal is rarely taken from a decision of the Mahájan. Occasionally, but not often, disputants engage their respective gilds in a dispute without interesting the gilds in it. In such a case, instead of referring to the Mahájan the nominally opposed gilds will appoint a council or committee to settle the dispute. In a small village where there is no Mahájan the Patel is the referee in disputes among members of any artizan gild.¹

POWER OF THE GILDS.

The power of the gilds is rapidly declining. At present their ancient control, which it is evident was exercised not only two thousand years ago, but until very recently, is preserved only in a few places. In Gujarát the gilds are at their strongest, and are best represented in the city of Ahmedabád; in Rájputana the power of the gilds is much less than in Gujarát, and in some of the cities of this district almost nominal. Jey-pore is an example of the intermediate position of the gilds, where they still exist, but do not exercise the powers they have in Gujarát; while Oodeypore, another city of Rájputana, shows a still weaker organization, for there is here no attempt to regulate trade or wages, and the nomenclature is changing to the purely conventional use of Mahájan (as the title of an individual) such as is found in the eastern districts. In Ajmere, which is not a native state, there is practically no gild-power, and the terms Sheth and Mahájan have only a social meaning.

¹ Compare Mr. Little's account of the Panch Mahals in the third volume of the *Bombay Gazetteer*, p. 251. His remarks in regard to the referee may be generalized.

To the south, the gilds have a sort of loose existence among artizans and the lowest workmen of Bombay, but the modern emporia, Bombay and Calcutta, have grown up under influences foreign to the cultivation of gilds, and the latter have in these cities the appearance of weak exotics. During the plague some of these Bombay workmen's gilds made a stand against certain sanitary regulations, but they could not maintain it. In Poona there are no Mahájans, and even the Nagar Sheth, who used to be a power there, exists no longer. There is here a sort of Panch or committee of all trades. This now takes the place of the council of chiefs, which used to be influential. In case of need of conference or mutual support the different trades confer informally and may unite in combined action, but there is no real organization of gilds. This seems to be about the southern boundary of the gild-system, as Benares, where Mahájan simply means 'banker' and the gilds are only loose associations, is the eastern limit.

In the Puñjáb the country villages are almost gildless. There is, to be sure, on extraordinary occasions, a sort of union of people interested in business, such as a mutual agreement to close shops as a sign of popular discontent, or some such concert of action for a definite cause, but there is no constant union. The only approach to the dignity of Sheth and Mahájan¹ is an agreement on the part of grain-dealers in regard to prices. Similar agreements are sometimes made by other business men acting as a temporary body, but not as a legal corporation. The only officer in the lower grades of work is the semi-governmental Chaudhari or Head-man. But this Head-man's office is merely to act as spokesman for men of his class and be their agent in dealing with Government, especially in arranging service which they have to perform, settling the terms of a contract, etc. As an agent he may retain a percentage out of the pay of the men who do the work for government. Thus the *shuturbán* or camel drivers, cartmen, dhooly-

¹ The word Mahájan is here synonymous with (any) Vania. It is interesting to see that the name of the third caste is still retained in the Puñjáb, where Vania interchanges not only with Mahájan but also with Wesh, i. e. Vaiçya, the old name for merchant (and farmer).—Census Report, 1891, i. p. 291.

bearers, and such workmen all have a Chaudhari, who in some respects seems like the Patel of a gild, but he is really only a Muccadum, head-man or boss-workman. There is of course a Pancháyat, but that is concerned only with caste-matters, and the term is not used of gilds as in Gujarát.

To the east, in the Delhi district (now called Puñjáb), there is more gild-organization, but without solidarity. A sort of caste of rich merchants is all that the Mahájans amount to in the Northwest Provinces generally, but only from Delhi to Lucknow has the word its western meaning. Still further east, in the Northwest Provinces and along the eastern Ganges, the name has only its literal signification. The artizan trade-gilds of the Northwest Provinces either have not developed or are a weak imitation of Gujarát models. A third possibility may be, however, that they have lost power they used to possess. In Oudh they were formally powerful, but now they are often nothing but castes. In some cases the gilds have actually become castes, just as castes have become gilds. For occupation has produced caste, not, as is sometimes claimed, as the only root of the institution, but as one factor in the upbuilding of that conglomerate structure. The word Nyát or caste is in fact sometimes applied to those lower artizan gilds which as a collective group stand opposed to the union of Vania and Brahmans (Mahájans). This is true of all districts. Thus in the Kadi division, North Baroda, there is often no distinction between gild and caste in the case of Nyáts, which are practically dependent on the Mahájan. The latter directs and commands the Nyáts and admits to its consultation only the latter's Patels. Here the real gild has shown its power over the pseudo-gild of the caste.¹

STRIKES.

The gilds often go on a strike. One of the latest cases was in the spring of 1897, when the *holalkhores*, or cleaners, of

¹ On these points compare further the *Gazetteer of the N. W. Provinces*, vol. v. pp. 47, 582; and the *Bombay Gazetteer*, vol. vii. p. 160; vol. xviii. p. 173. In some cases the Mahájan even fixes the wages of the Nyát workmen.

Bombay refused to work and 'went out' in a body. Wages and working-hours are not often the cause of strikes, but religious differences and fancied injuries to feelings. Refusal of government to give redress when a gild considers itself wronged in respect of taxation sometimes precipitates a strike. A few years ago the hand-loom weavers of Ahmedabád struck on a mixed complaint and were largely replaced by boys. In general lads are employed to a much greater extent than with us, partly on account of the smaller wage given to boys, and partly because they are less apt to give trouble. One of the largest carpet-manufactories in Ahmedabád employ boys altogether with the exception of two grown men.

Religious differences have caused strikes in Kathiawar within the last few years, as has been recorded by Mr. Proctor-Sims. Thus in 1845, the Vanias of Gondal could get no redress for the insult offered to their Hindu feelings by the Mahommedan butchers, who sold meat openly, and they were driven to shut up shop; which compelled the Government to pass a rule that all butchers should kill secretly and sell behind a screen—a provision now usually observed everywhere. On the other hand, twelve years later the Vanias of Dhoráji wounded the religious feelings of the Mahommedans. The latter killed a few Vanias and the State in turn punished the Mahommedan ring-leaders. The malcontents struck work in a body and some of them left the town, but their strike failed, as the Government, taking the side of the Vanias, ordered all Mahommedans to leave the place. This was too much for the latter and a reconciliation took place. In 1881 a sacred cow was wounded by some Voharas, and as nothing was done about it the Hindu Vanias, whose feelings had been outraged, struck for three days and thus forced the offender to be imprisoned. The year before this the barbers of Wadhwan struck—a rare event—for higher wages. But this strike failed because the general public (i. e., all the other gilds) opposed the demand. To prevent a fall of wages a strike has sometimes been ordered by the councils of gilds (acting together). A case of this kind is reported by Mr. Little in the Panch Mahals,¹ but such a

¹ *Bombay Gazetteer*, vol. iii. p. 251.

motive appears to be very unusual. In such instances the gilds form a true trade-union. Strikes of a semi-religious nature, as for instance against the execution of sanitary measures regarded as religiously offensive, are not uncommon. But as such measures are instituted only by the British and the officials are not deterred by them, they are usually given up in a few days.

THE GILD AND THE STATE.

It is clear from the passage on gilds, cited above from the Sanskrit epic, that in ancient times there was a mutual support of state and gild. The strict advice to the king not to provoke, but to conciliate the gilds, the steady increase of power which is portrayed in the later as compared with the earlier law-books and is based on the yielding of the state to the demand of the gilds for self-government—all these items of growth are shown to us in the extant literature, but the connection between state-officials and the gilds is left to the imagination or to *a posteriori* reasoning. Judging, however, from what has continually happened during this century, that relation cannot be very doubtful. Reciprocal protection has doubtless always figured largely as a factor in the maintenance of the power of the gilds. In plain English I mean a 'deal,' but the opprobrium attaching to this word is wanting when the synonym is employed, and there is in fact no Oriental prejudice which would suggest immorality. A state-official does what he can to strengthen the hands of a rich city or corporation. The corporation, on the other hand, would not be so ungrateful as to neglect the official's interest. The gild intrigues for him. Or it may be a trifle; he wants some cloth dyed. The gild sees that it is done and charges nothing. Mr. Lely, *loc. cit.*, p. 107, cites cases of this sort which occurred not many years ago. Of course no such practices are known to-day. The conference, when asked in regard to reciprocal protection, said that it was all a thing of the past. In the old days "a favor for a favor" was usual; nowadays favors were neither asked nor given. The only relation existing between state and gild is to-day a union of gilds (into a sort of trades-union)

to protest against taxes regarded as too heavy. The local authorities sometimes help out the gilds in this matter, but there is "no bribery." The first part of this statement agrees with what Mr. Proctor-Sims says in the report already cited; the last part may be accepted on the evidence of the honorable Sheths who give it. The only state-support at present consists in fees to a local Sheth for collecting trade-taxes.

In manufacturing centers where modern mills are in operation there is often but a faint reflection of old conditions, even in Gujarát. In Ahmedabád the mills have influenced the gilds, but the latter are still vigorous. In Bhaunagar, however, a model city of Gujarát, in the heart of the old gild district, there are mills owned by a Hindu whose workmen are mainly Mohammedans, and there is no gild in the old sense, though the term Mahájan is employed. But the intercourse between master and men is one of a personal rather than of a corporate nature. There is a Sheth, but the office is not hereditary.

This breaking up of old conditions is seen in many aspects of contemporary life, notably in the effacement of the lines of sect and caste. I met a gentleman in Oodeypore who told me that he was a Kshatria and a Vaiçya, a Vishnuite and a Jain. He was of Rájput descent, but a Vania merchant, a Vishnuite by sect, but a Shrávaka by descent, as his father had been converted to Jainism. He regarded himself as a member of both religious bodies and of both castes. Odd as is this combination, I am not sure that it would not have been possible, even in the ancient world. We know that there were many who were practically adherents of two religious sects at once, and we need go no further than the great epic to find distressed Kshatriyas, or members of the warrior-caste, who were at the same time goldsmiths by profession. The latter have always regarded themselves as Vaiçyas, or members of the third caste. In epic phraseology these distressed Rajputs were Kshatriyas by their social order, *varna*, but goldsmiths by their *jāti*, the word for caste-profession.¹

It is probable that the time when the gilds can be looked

¹ Mahábhárata, xii. 49, 84: *ete kshatriyadāyaddās . . . hemakārdājdītim nityam samāgrīdās*. Compare Nyát above, that is *idti*.

upon as economically useful has passed by. But if we review their history we must, I think, see in them an important factor in the development of mercantile interests at a time when such a combination as they represented was indispensable to the advancement of the middle classes in their struggle for recognition at the hands both of despotic kings and of an organized priesthood that was bent on suppressing the elevation of the third estate. Before the rise of gilds in India it was an axiom of priestly wisdom, under which the kings were brought up, that farmers and traders existed merely as "food for kings" (and priest).¹ With the growth of the gilds this pretension began to be resisted successfully, and the new axiom of later law was evolved, whereby the king was advised not to oppress the gilds and not to tax too heavily. So commerce in the modern sense became possible.

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¹ "A king and death are the fear of the rich," it is said in the great epic, iii. 2, 39.

NOTES.

The National Municipal League. The American municipal problem cannot be said to be due solely to the rapid growth of American cities during the past thirty years, inasmuch as English, German and French cities during the same period have grown with equal if not greater rapidity; nor to the increase in number and extent of municipal functions, for the experience of foreign cities has been the same; nor can it be said to be due to universal suffrage, because in cities like Portland, Oregon, for instance, where the voting population is intelligent, homogeneous and almost entirely native-born, municipal misrule and mismanagement prevail; nor can it be entirely attributed to the lack of adequate legislation, because numerous carefully considered laws have been placed upon our statute books during the past decade intended to introduce an era of efficiency and competency, but they have succeeded only in mitigating some of the evils, not in furnishing a solution. What then has been and is the source of the difficulty but the lack of what may be called, to borrow a phrase from jurisprudence, a "prevalent sense of right," or as the Germans have it, *Rechtsgefühl*.

Laws are placed upon the statute book and reforms inaugurated before there has been developed a public opinion or sense of right which will insist upon their enforcement; which should the occasion arise, will, through the *posse comitatus*, aid the sheriff in enforcing its ends and purposes. We have bosses and machine rule in our cities because the great majority of the inhabitants tolerate them. When it ceases to tolerate them they will disappear. Machines go out of existence and bosses retire from power permanently when the sentiment against them predominates and persists. They return to power when the sentiment against them relaxes. This accounts for the periodic character of reform movements. The prevalent sense of right in our American municipal communities has been intermittent, principally because the attention and talent of Americans has been diverted to other lines of thought and activity.

The great mass of the residents of our American cities has been absorbed in mercantile and manufacturing pursuits, which has yielded vastly greater returns than have been possible in municipal service; they have been sufficiently broad and undeveloped to

absorb the time and attention of all the capable men willing to work in them. Then the tenure of public office has been (under the spoils system) precarious; while that of private employment has been continuous, as well as progressively and honestly profitable. As commercial and industrial pursuits, however, become thoroughly established, labor-saving devices developed, and combinations of capital made more and more effective, they will be unable to utilize the services of all who may offer themselves, and talent and energy will be compelled to seek other avenues of employment.

We find a further reason for the lack of a prevalent sense of right in a somewhat different direction. The expensiveness and extravagance of municipal corruption and mismanagement has not as yet been sufficiently great, nor the form of taxation such, as to impress taxpayers to the point of attention. In countries like Germany or France, where the national taxes are heavy and direct, the taxpayer feels keenly any increase in municipal rates. When our national rates of taxation increase, as they are most likely to do if we enter upon an aggressive foreign policy, abandoning our present policy of isolation, thus involving the maintenance of a large navy and a permanently large standing army, then the question of municipal taxation will assume a much more important position and our municipal service will of necessity have to be conducted upon a basis of stricter economy and honesty.

With the settlement of our industries in definite and permanent lines and with the reform of our municipal civil service and the threatened increase of national taxation assured facts, there must come a revision of popular opinion concerning municipal government and its proper sphere and function. The popular notion that municipal government is secondary in importance to State and national governments, and that it must be subordinated to them, is unsound. It is within the power of the municipality to affect more profoundly more lines of activity and afford more sources of protection and pleasure than either the State or national government. Instead of being subordinated, it should be emphasized and elevated. Because we have heretofore regarded it as secondary to the State and national branches of government, we have made its policies secondary and subsidiary and have grown accustomed to determining municipal affairs from the standpoint of the necessities of State and national politics. So far has this tendency gone that in many if not most communities support of other than your national party's candidates for municipal offices is regarded as an unpardonable political heresy.

This tendency has contributed largely to the maintenance of a low standard of public opinion. Instead of impartial and unequivocal condemnation of wrong-doing by whomsoever committed, whether in our own party or that of our opponents, we find that when it is committed by one bearing the badge of our own party that all the members of our party are disposed to condone it. The inevitable result of this tenderness is to produce a low average sense of right.

This condition of affairs is accentuated still further by an indisposition on the part of a large portion of every community to condemn wrong-doing because it may either immediately or at some future time turn up to interfere with a matter of personal profit or benefit. For instance, I may object strongly to the methods of a certain company seeking to secure a municipal privilege; but I do not make my objection public because I am interested in another company which either has just secured a grant or will shortly seek one, and I do not wish my objections to return to plague me. It is not necessary that I should be directly interested as a stockholder; I may be interested as a creditor or as a banker who has loaned money on its securities or a stockholder in a bank which has loaned money on them or the trustee of an estate of which its securities form a part.

The municipal problem exists because a prevalent sense of right in favor of municipal efficiency and honesty does not exist, and the National Municipal League was organized and has been working to supply this lack. Those who attended the Philadelphia Conference for Good City Government in January, 1894, out of which the National Municipal League grew, were impressed with the great necessity for further information as to the municipal problem, its extent and its cause. From every hand came the same story—wastefulness, inefficiency, all too frequent scandals, and the rule of the least estimable and the least trustworthy. Why was this so? I have tried to indicate the reasons briefly in this note. They have been developed at greater length in the five volumes of the Proceedings of the several Conferences that have thus far been held under the auspices of the National Municipal League.

How is a new era for our cities to be inaugurated—how are we to abolish wastefulness and inefficiency and secure the enactment and enforcement of good laws and the selection of men of trained ability and proved integrity for all municipal positions and to prevent the success of incompetent and corrupt candidates for public office? Only by creating and maintaining a deeper interest in

municipal affairs and by creating a public opinion that will be indifferent to anything short of the best in all matters pertaining to the welfare of our American municipalities.

To this task the National Municipal League has addressed itself with, I am happy to be able to say, an increasing measure of success. Since its formation in May, 1914, it has zealously pursued its object. Thanks to its guidance and inspiration, new local reform organizations have been started and old ones reorganized and both have undertaken and successfully presented important work. Newspapers have been interested and have as a consequence cooperated in spreading information and creating public interest. The printed page and spoken word have been utilized to the same end; in short, an active, aggressive, persistent propaganda has been carried on so that the American people may appreciate the importance and growth of the municipal situation.

The friends of the work as represented in the associate membership (*composed of individuals*), and in the affiliated membership (*composed of organizations*), are, comparatively speaking, few. The enemies of the work as represented in the bosses and machines and their henchmen and hangers-on, are, comparatively speaking, few. The great proportion of our citizens is indifferent. To convert this indifferent class into an interested and educated class is the purpose of the National Municipal League, and to succeed in this it will be necessary to create a prevalent sense of right concerning municipal affairs. There are very few people who approve and support murder. The great mass disapprove and oppose it. Consequently murders are extremely few as the prevalent sense of right is against it. The same may be said of arson and highway robbery. Municipal corruption and inefficiency are not actively disapproved or opposed by our American communities because there does not exist a prevalent sense of right opposed to them. Hence the necessity for an organization working along the lines of the National Municipal League.

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The Alaskan Gold Fields. The Department of Labor, in its May bulletin, gives a valuable and detailed account of Alaskan gold fields, by Mr. Sam C. Dunham, who was sent as a special commissioner in order to report upon this subject. His article covers over 125 pages, and is richly illustrated by maps and figures.

Some of the details regarding prices and wages at Dawson will interest the economist. The one barber shop charges 50 cents for shaving and \$1 for hair cutting. There are five or six physicians, whose fees are an ounce of gold, or about \$17, a visit. Food is naturally scarce. An enterprising individual opened a soup house with the following sign: "Bean Soup from 10 A. M. to 3 P. M., \$2.50." He served with the soup a cup of tea and a slice of bread, and did a rushing business until he was forced to close on account of the scarcity of beans. There is, however, a great demand for cheap jewelry, and an active sale for diamonds of from 1 to 4 carats. Gold dust is the common medium of exchange, and every business house has to have a weigher to manage its gold scales. Gold dust is, however, a somewhat inconvenient medium for small transactions, and after a man has taken two or three drinks of Dawson whiskey he is apt to forget to tie his gold sack, and in taking it out of his pocket to pay for the next drink is liable to sow some of his dust on the floor, where a small portion of it is naturally lost to him, but not to the janitor, who pans out the floor sweepings in the morning, often cleaning up from one to two ounces (p. 340).

Economic Aspects of the Liquor Problem. A summary of the leading facts in the forthcoming Twelfth Annual Report of the Commissioner of Labor, is given in the Bulletin of the Department for July. This report will deal with the economic aspects of the liquor problem, or at least with some of them. The principal topics covered by this investigation are the materials used in the production of liquors; the manufacture of liquors as an industry; their transportation; the consumption of and traffic in liquors; the revenue derived from their manufacture and traffic; the laws regulating the collection of revenue; the financial conditions relating to the liquor business; and the experience and practice of employers in relation to the use of intoxicants. For the facts bearing upon several of these subjects, the report avails itself of the figures of the census of 1890; the original investigation of the department being applied to the capital invested and persons employed in the liquor traffic, the revenue derived from the same, and the experience and practice of employers with regard to the use of intoxicants. The number of persons engaged in the manufacture and traffic could be ascertained by first getting the names of the persons to whom special licenses had been issued by the

government, and canvassing them. As some 237,235 persons, however, were involved in this, it was thought best to select only certain sections of the country, and to canvass the 40,000 persons in these sections. Of those canvassed, 29,258 made returns, and from their returns the figures for the entire country were estimated. According to this estimate, no less than 191,519 proprietors of establishments were found, employing 241,755 persons. The capital invested in the liquor traffic of all kinds was estimated at over \$957,000,000, of which 59 per cent. was found in the retail trade. The total revenue collected by the government, States, counties and cities, was \$165,000,000.

Perhaps the most interesting part of the inquiry relates to the experience and practice of employers in respect to the use of intoxicants. The Department succeeded in getting returns from over 7,000 establishments, of which 5,363 reported that means were taken to ascertain whether or not an employe was addicted to the use of liquor. This may not fairly represent the proportion throughout the whole country, but it suggests a means of promoting temperance which may yet prove extremely effective. The fact that absolute steadiness is becoming more and more essential in business, as the machinery used becomes more delicate, and the responsibility of the individual employe increases, will put drinking men at such a disadvantage, as compared with others, that intemperance will be discouraged by that mere fact. In view of the custom existing not very long ago of serving grog regularly in certain enterprises, this showing may be considered encouraging for the friends of temperance.

The late Mr. E. A. Angell. Among the lost on the Bourgeoisie was Mr. E. A. Angell of Cleveland. Although not widely known outside the legal profession, of which he was one of the leading members in Ohio, his work in the cause of political and economic reform deserves a brief commemoration from the *YALE REVIEW*, to which he was a contributor. An extremely busy lawyer, he found the time to accept an appointment from Gov. McKinley in 1893 as a member of the Ohio tax commission. To the work of this body he devoted himself unsparingly, combining the results of careful study of the best modern literature of taxation with extensive practical experience and knowledge of law. The report, which was almost entirely his work, ranks as one of the best of recent years. It is particularly valuable for its discus-

sion of the taxation of railway property. Mr. Angell's keen sense of justice and enthusiastic belief in the principles of civil liberty made him an unwearied opponent of the vicious and underhanded means employed by the State to detect the evasion of the taxation of personal property. (See his article on "The Tax Inquisitor System in Ohio," *YALE REVIEW*, February, 1897.) He was also warmly devoted to the cause of sound money and served as a delegate from the Cleveland Chamber of Commerce to the Indianapolis Convention. Had his life been spared he might have accomplished much more for these and similar reforms and have made valuable contributions to the literature of taxation. His intellectual ability, modesty, sympathy, and loyalty to his convictions combined to form at once a most lovable man and a citizen who could ill be spared by his community.

Gold Contracts in the United States. Mr. Charles E. Curtis, Vice-President of the New Haven City Bank, who compiled the figures regarding the indebtedness of railroads in the United States, published in the *YALE REVIEW* for August, 1894, has kindly made for us some new calculations bearing upon the same subject. His figures show that at that time 61 per cent. of the bonded railroad indebtedness of the United States was payable specifically in gold. In order to ascertain what changes in public sentiment have taken place regarding this subject during the past four years, Mr. Curtis has examined the new issues of bonds made since 1895. During that period, a large number of railroads have gone into the hands of receivers, and the process of reorganization has involved the issuing of new bonds. The railroads which were in the hands of receivers on April 1st, 1895, had, down to February, 1898, bonds aggregating \$733,571,250. Of this sum, all but \$49,070,000 were payable in gold; and all of these currency bonds, with the exception of \$413,000, were income bonds; so that, with this very slight exception, it may be said that all of the mortgage bonds of twenty-seven railroads, issued since April, 1895, are payable in gold. These figures are striking as showing the extent to which the gold standard has been adopted by contract in large transactions. And though it is not easy to compile similar figures relating to other corporations, personal observation and conversation with brokers leads to the belief that the same process is common with regard to other corporations.

BOOK NOTICES

France. By John Edward Courtney Bodley. Two volumes, pages 800 and 824. The Macmillan Co. New York and London 1898.

This notable commentary on the government of France for the year is in fact as much a commentary as an exposition, is beyond question one of the two or three most important books in Political Science of the year. It is, in the first place, an authoritative work. The author devoted the whole of his time for seven years to a preparation associating with statesmen and literary men of the highest type as well as with politicians of what he seems to consider the normal low type, tradesmen and peasants in every part of France, and the proofs have been read by such men as M. Paul Leroy-Beaulieu, M. Richard Waddington, and M. Camille Ruyssen.

The author says that the capital subject of these volumes is *Present France after a Century of Revolution*; but not merely is his first book devoted to the influence of the Great Revolution upon modern France, but it would hardly be out of place to say that the real purpose of the whole work is a discussion of the influence exerted by that Revolution.

Certainly the most interesting parts of the work to the general reader, and probably the parts most valuable also, are those devoted to an account of the citizens of France, their modes of life and their habits of thought, especially as regards politics and politicians. We find the average French citizen, especially of the middle and lower classes, depicted, as by other writers, as diligent, thrifty, honest, easy to please, with steady habits of life which have, on the whole, for the last century, been almost the sole source of the prosperity of France and of the real stability of its political institutions, in spite of the varieties of external form which these institutions have, from time to time, assumed.

In spite of these fortunate characteristics of the average citizen, however, Mr. Bodley finds the educated French people pessimistic, and the cause of their pessimism he thinks can be definitely stated. The first is the association of parliamentary government with a

centralized administrative bureaucracy and the results that come from such association. The centralized administration, established by the great, and in this respect the wise, Napoleon, is suited to the genius of the French people; but parliamentary government is ill adapted to their needs, something which they cannot understand, and, in consequence, is something which leads to various abuses, sufficient to make thoughtful men pessimistic. The second cause he finds in the free press of France, which, in his judgment, let us in these later days be thankful to note, does not represent at all accurately the wishes or opinions of the people of France, and which, as everyone knows, is likely to be abusive, scurrilous and irreverent, in spite of the keen, critical skill and literary ability shown in some of the papers of the better type. The third cause is found in the character of the social life of those who are wont to call themselves and to be esteemed by others as the upper classes in France. These causes for pessimism, however, he thinks may be well offset in many cases by the superior excellence, in all particulars, of the life and work of the representatives of the University, of the church and of the army. It is questionable whether his opinion regarding the good qualities and the good influences of the army would not have been changed by the occurrences of the last few months.

Some very suggestive chapters in the first volume are devoted to a consideration of the meanings of Liberty, Equality, Fraternity and Patriotism among the French to-day. These watchwords of the Revolution, in the author's judgment, still remain rather theoretical dogmas than principles of practical life. They still appear upon the monuments of France, are still watchwords on the tongues of the people; but the average French citizen, in his experiences with the tax collector, with the *gens d'armes*, and with the other representatives of the bureaucracy, submits cheerfully, and apparently willingly, to infringements upon his own personal liberty, as that word is used in England and America, which would be sufficient to raise rebellion in either of these countries.

Likewise in religious matters, in spite of the recognition of the Republic by the church under the influence, not to say compulsion, of the Pope, the intolerance of the anti-clericals has become so influential that politicians, from President to prefect, dare not recognize, in any public capacity, God or the church. We have been accustomed to think of the church as intolerant; but in France the masses of the people who are generally connected with the

church seem largely indifferent on matters of both politics and religion, while the relatively few free thinkers are intolerant in both.

In the chapter on Equality, the French weakness for titles and decorations is good-humoredly portrayed, while the statements regarding the aristocracy of wealth show that the author considers this a weakness, not only of France, but of England and the United States as well. As has been so often noted by other writers, the patriotism of the French is peculiarly a love for France itself and for the French soil, rather than for the institutions of the home country.

The author's judgment of the French Revolution seems to be based entirely upon that of Taine, and few people would be inclined to agree altogether with this judgment regarding the effect of the Revolution upon present political conditions. While we should all be of the opinion that one "great tangible result was the machine of administrative government constructed by Napoleon," and that another "psychological or moral result" is a people "which has never yet found a political government to soothe and weld together the elements unsettled by the great upheaval," few of us would be inclined to agree that these were practically the sole results. We should also object to the sentences: "The best that can be said of the French Revolution is that, just when civilization was on the point of making history colorless, it burst forth and produced for the student and the artist a collection of pictures and documents, thrilling and pathetic, grandiose and revolting, such as no epoch of antiquity or of modern times has supplied. But to private intellectual pleasure for the cultivated it was hardly worth while that millions of the race should have lamentably perished before their term."

Regarding the government of France itself, the author takes up, in these volumes, only the Chief of the State, the Parliamentary System and Political Parties. A third volume is promised to deal with the centralized administration, the church and education, the judicial and fiscal systems, as well as with questions relating to capital and labor, to the colonies, and to the army. It is not possible to tell just how much will be included in these later discussions of the centralized administration, but unless much is included that has a bearing upon the Chief of State and the nature of his functions, that subject will certainly be left insufficiently treated.

The larger part of the second volume is devoted to the legislative system. As a detailed exposition of that system the account must be considered unsatisfactory, in many respects less complete than

that of Lowell or Dupriez; but as a commentary upon the system it is, in most respects, excellent. At times, to be sure, it seems as if the instability of the French government were altogether too vaguely explained by mere allusions to the influence of the French Revolution, and to the inability of the French people to understand and to adapt themselves to parliamentary institutions; but again, statements such as that the bane of the representative system in France is envy, as shown by the fact that every minister who bids fair to attain more than the ordinary meed of power, is thrown out of office; examples of the ways in which the deputies use their power in local elections, in distribution of departmental offices, in weakening the power of ministers so as to strengthen their own positions, etc., are very enlightening. Nowhere else does one find so good an explanation of the reasons for the character of the membership of the French Chamber of Deputies and the Senate, or of the standing of the representatives with their countrymen. Nowhere else, perhaps, does one find quite so good an explanation of the reasons why the French Deputies do not "legislate," in the English or American sense of that word, but devote their time chiefly to voting the budget from year to year, and to the interpellation of the ministers, frequently on subjects scandalous in their nature.

Of particular interest to readers, both in England and America, are the numerous comparisons with the English government and the occasional references to America. The author's ideas regarding American institutions, one would gather from the nature of his allusions to them, have been derived largely from his knowledge of literature like the New York "Nation," and from association with Americans whose views are somewhat similar. While, so far as his statements go, they cannot, perhaps, be said to be inaccurate, the tone of comment is rather more pessimistic than that of most Americans, or even than that of Mr. Bryce, the best critic of our institutions. Of a somewhat similar tone, also, is his view of English institutions. Many of our writers who are disposed to hold up England as a model for America, will be surprised to note that it is a question in Mr. Bodley's mind if the emoluments of parliamentary office are not a chief force in holding the English party system together, a system which he nevertheless believes to be essential to a decentralized popular government.

The same pessimistic tone, with which one finds it hardly possible to agree in any of these particulars, appears also in his conclusion regarding the probable future of the French government. He

apparently thinks that at a period not far remote, the attempt toward keeping up a parliamentary governmental system is likely to be abandoned, and that France will again fall under the control of some master imperial in power, if not in name, to whose rule will be well adapted the present centralized system which is apparently so well suited to the needs of the French people.

The work aims to be an historical and philosophical exposition. Its problem is to show the working of the Napoleonic machine of centralization, with parliamentary institutions imported from England under the influence of Montesquieu's great work. In many ways it would be more satisfactory to the reader if it were more expository, and less devoted to philosophizing; if it gave more details of the form and of the workings of government, made fewer historical allusions, some of which are so remote that, to the average reader, they are not especially enlightening, and permitted the reader from the facts given to draw his own conclusions regarding philosophical causes.

Such a work naturally challenges comparison with Bryce's "American Commonwealth," and in this particular, at least, it must be pronounced much inferior. Bryce is not wanting in philosophical comment, but such comment is incidental, whereas Bodley's work often seems to have been written with the idea of upholding his philosophical thesis. The style of the work is interesting, though possibly too ambitious at times, and there can be no doubt that it will prove, as it ought to prove, popular, in both England and America.

J. W. JENKS.

Cornell University.

The Chances of Death and other Studies in Evolution. By Karl Pearson, M.A., F.R.S., Professor of Applied Mathematics in University College. London and New York, Edward Arnold, 1897—8vo. Two volumes, xi, 388, 460 pp.

Professor Pearson, whose profound memoirs on the "Mathematical Theory of Evolution" have given him a high rank among specialists in mathematical statistics, addresses himself in these volumes to a more general audience. Every lay reader, interested in social science, evolution, or mathematics, ought to avail himself of the opportunity thus offered to become acquainted with a mind which is certainly one of the most versatile, acute and scholarly of the present generation.

The essays are of a miscellaneous character. The first, on the "Chances of Death," presents in a popular way the author's investigations into the laws of chance as applied to vital statistics. He traces the development of the law of mortality from the mediæval notion of the "Dance of Death" (with illustrations from Holbein and others) to modern "life tables." Professor Pearson's chief contribution to this well-worn subject consists in resolving the mortality curve into a series of "curves of chance," or "frequency curves." It has long been known that the distribution of shots about a bull's eye, the distribution of men's heights or weights about a mean, the fluctuations of a barometer, of coin tossing, lottery drawing and so forth, follow a common "law of chance." But human mortality has hitherto refused to conform to this law. Empirical formulae have been found by Gompertz, Makeham and others, but none resembling the formula for the law of chance. Professor Pearson, however, (following a suggestion of Lexis) shows that the mortality curve is simply the sum of five chance curves. It is as if five marksmen were shooting at five different bull's-eyes in a row. The distribution of such an assemblage of shots would puzzle an observer until he learned that it came about through simple superposition of five distributions of the familiar type. One of death's marksmen aims at age 72 as the bull's-eye, but scatters his shots widely on either side. A second aims at 42, a third at 23, while the fourth and fifth aim at ages 3 and 1 respectively. In unravelling the last marksman's hits, Prof. Pearson found, curiously enough, that the distribution would not conform to the law of chance until he had shifted the origin from birth to a point nine months earlier, thus including antenatal mortality.

The second essay, on "Monte Carlo Roulette," contains many interesting statistics of games of chance, showing the close accord of fact with theory. This accord, so striking for other games of chance (with coins, dice, cards, balls, etc.) is strangely absent in Monte Carlo roulette. Where practice showed 534 runs of 3, theory prescribed only 333, making a deviation of 201. The "standard deviation" is 22. "The odds are thousand millions to one against such a deviation as nine or ten times the standard." The author does not explain this discrepancy (which is not exceptional) but discreetly concludes that "Monte Carlo roulette . . . is . . . the most prodigious miracle of the nineteenth century."

The third paper, "Reproductive Selection," is a valuable study of one of the most important factors of evolution. If fertility were

inherited from one parent without being affected by the other, a very few generations would suffice to practically extinguish the less fertile elements of the population. Only a fifth or a sixth of the adults of one generation produce half of the succeeding generation. The author shows statistical evidence of artificial limitation of offspring. A study of 4,390 families shows an abnormally low number of families with 5 and 6 children and a correspondingly excessive number of families with 2, 3 and 4. "Normal" numbers are such as would conform to the law of chance. In other words, through Malthusian restraints, many families which would otherwise be reckoned as large are now counted among the small. The death rate is found to increase with the size of the family, showing that natural selection (survival of the healthy through a favorable death rate) tends to check reproductive selection (survival of the fertile though a favorable birth rate). Assuming fertility inherited, Prof. Pearson believes that at present reproductive selection is a far more important factor of evolution than natural selection.

The first volume is concluded with a long statistical discussion of the relative variability of man and woman, controverting the current opinion that man is the more variable.

The above mentioned essays are, perhaps, the most thorough and convincing. Those of chief interest to the economist, however, are the fourth, "Socialism and Natural Selection," and the seventh, "Woman and Labour." In the former, issue is taken with the notion that socialism is opposed to natural selection. The chief factors of evolution would be as operative under socialism as to-day. The author glosses over in a footnote the problem of the socialistic marriage rate and marriage age. He is himself an ardent socialist. He believes, not in a dead level of equality, but in a system of economic handicaps so as to protect labor against capital and compensate women for the burden of child-bearing. He believes in "reducing the interest on capital and decreasing the wages of 'ability.'" He does not descend to particulars. As socialist he turns dogmatist and prophet. In his special field he shows Darwinian care and caution, and criticises unsparingly such self-confident writers as Benjamin Kidd. But, when the subject is economics, his caution suddenly leaves him. He proclaims the coming socialism with as much assurance as others proclaim "the coming individualism." He foresees a strong Independent Labour party and an equally strong Independent Woman's party, "and then the political jobbers will disappear right and left."

The essays "Woman as Witch," "Hans seeks his Luck, and "Kindred Group Marriage" are of great interest to the student of social origins. They treat of the supposed early matriarchal system and sex customs. The author makes an original philological study of the words for sex, not hesitating to question received derivations.

The remaining essays are on scientific or religious topics or both. The fifth, "Politics and Science," is a severe criticism of Lord Salisbury's famous Oxford address, in which Darwinism was called in question. The author is a fearless as well as a merciless critic. St. George Mivart, Balfour, Kidd, Drummond, Salisbury, even Spencer and Kelvin, suffer at his hands. He detests Pseudoscience, Analogical Argument, Theological Bias, and the Manchester School of Economics. His enthusiasms are equally strong. He is a humanitarian to the core, sympathizes with folk-movements, even when wrong or superstitious. While a professed atheist, he regards popular religions with reverence. He thinks we fail to-day to understand the mediæval church through modern intolerance both ecclesiastical and sceptic. His last essay is a history of the Passion Play, in which he seeks to show the influence of the Teutonic folk spirit and pagan worship on Christianity. He does not regard the middle ages as "dark":

"As we do not merely smile at the stories of the Greek gods, but study their evolution and their legends in order to appreciate a great literature, a greater philosophy, and the highest development of plastic art, so we must study the mediæval gods even in their smallest details, if we would master the spirit of another great literature, another great philosophy, and the highest development of pictorial art the world has known. Nay, if the Hellenist smiles at you, reader, say boldly that you will set your Dante against his Homer, that St. Thomas was not more arid than is Aristotle, that your Zeitblom and Dürer were as great creative artists as his Praxiteles and Pheidias; nay, that he who built the Parthenon would have stood speechless and as a little child before the Minster at Strassburg, or the cathedral at Cologne. Take that Hellenist through the streets and courtyards of Nürnberg or Augsburg, and give back to them the color and the incident of the folk life of 500 years ago,—and if he be an artist by nature, he will hesitate to give the palm to Periclean Athens, even if the sigh of her slaves has not caught his ear."

I. F.

The Abolition of Privateering and the Declaration of Paris. By Francis R. Stark, LL.B., Ph.D. (Studies in History, Economics, and Public Law, Vol. VIII, No. 3.) New York, Columbia University, 1897—8vo, viii, 162 pp.

This little volume is one of the series of historical studies published under the auspices of the faculty of political science in Columbia University. It is an interesting and creditable historical study of the decline of privateering, including the story of the Marcy Amendment, and the attempt of Seward to commit the country to the Declaration of Paris at the beginning of the Civil War. Nothing is said, however, about the reasons which might very well persuade the United States to take this step at the present, reasons drawn from the comparative worthlessness of privateering and the absolute value of the other rules of the Declaration to a power usually neutral. The essay thus, as it seems to us, skips the interesting and practical part of the whole subject. Besides the essay on the history of privateering, there are preliminary sketches whose points the author sums as follows. "There are two conclusions from the foregoing chapters: First, that the theory of individual enmity is no longer defensible; and secondly, that the practice of capturing private property at sea is dying. It exists to-day where it exists at all for historical reasons purely; it is the logical result of a principle that is dethroned, and the student of history can deduce but one future for it." The argument seems to be that the continental publicists agree pretty well in denying the theory that all the subjects of belligerents are in a state of war, the one set with the other. A few American publicists share the same view. The fact which stands in the way is that private property of enemy subjects on sea is still liable to capture, but the tendency is to follow Marcy's suggestion and exempt this too. Therefore there is no longer reason for declining assent to the continental view of individual enmity.

To us, this argument appears the reverse of clear and logical: it blinks the facts: it fails to distinguish between law and policy: its conclusions are admirable enough, but reached by wrong methods. As the present war is abundantly showing, the capture of enemy's private property at sea is still legal. So our Courts hold, as Mr. Stark admits, that similar property on land *could* be lawfully seized if Congress chose. What is the irresistible inference? What theory alone explains such legal rights? Is it not because each government is at war with all the subjects of the

other? If our government makes a treaty exempting private property from capture, it is an act of policy, but does not alter the law. If all nations do the same it alters the law at the present, but cannot alter what it was before the change. The French publicists may argue against the capture of enemy's property: that does not alter the fact of its existence, and in 1870 their own government put it in force again. The whole continental theory, as it seems to us, from Napoleon's time down, is based upon hostility to English naval power and a desire to draw its teeth. What wonder that the English stick to their rules of capture. They have come down without a break from the *Consolato del Mare*, are enforced by the highest Courts of Great Britain and the United States to-day, and are used by any continental power which finds them convenient. And so they will exist until, it may be, abolished in return for some equivalent. Until abolished by agreement, they will be enforced. As enforced they wage war upon individual property in a variety of ways. War upon individual property is war upon the individual. Such war carried on against two sets of individuals by the government of each, is more easily explained by the theory that all in the one state are at war with all in the other than in any other way. Limited and softened in many ways under the influence of humanity and the growth of the neutral interest, the *theory* remains unchanged. To argue that because the observed facts of capture are less harsh, therefore the theory warranting capture has changed, seems to us a non sequitur, unnecessary, dangerous. We English-speaking people in these times cannot afford ourselves the pastime of spinning theories out of our own brains, in the face of the facts. For those theories, if accepted, may change the balance of the world's power, and the pastime become too serious.

T. S. WOOLSEY.

Yale University.

Étude Économique et Juridique sur les Bourses Allemandes de Valeurs et de Commerce. Par André-E. Sayous. 1898—Paris, Arthur Rousseau, 654 pp.

It is a pleasure to get hold of a book like this. The author, while ostensibly investigating a certain set of historical facts, has a power of generalization and suggestion which makes his work invaluable to any student of economics, whether he makes a specialty of this department or not.

After a brief historical introduction, the author treats successively of the general functions of exchanges, of the methods which they employ, and of the persons involved in their operations; in each case happily combining a study of the special circumstances of Germany with the broader applications of his subject-matter to other countries. In dealing with each of these topics he gives equal attention to the economic and the juristic sides of the matter. In fact it is one of the great merits of the book that it so well holds the balance between these coördinate parts of the subject.

We cannot better indicate the author's clearness of insight than by quoting one or two of his ideas. It shows itself from the very outset, where he criticises the current attempt to distinguish speculative from non-speculative sales—which has given our legislators so much trouble. "Let us not speak of a future or option (*opération à terme de bourse*) but of a *traffic* of this nature; a whole system of operations *à terme de bourse* in all their manifold concatenations We are dealing with a public demand, where there is a probable intention, it may be of both parties, it may be of one only, not to effect any actual delivery, but to retire with a differential gain; as distinct from those markets which satisfy individual demands (*besoins particuliers*) or those where the intent to deliver is altogether probable." This puts the case in a nutshell. If you have a speculative *market*, it makes little difference what form the transaction takes—cash or margin, delivery or settlement. The effect on the relations of supply and demand is practically the same.

One more suggestive quotation, and we are done. "The most important function of a stock exchange is to establish a sort of mean rate of interest at each moment for the free capital seeking investment. Arbitrage equalizes this from one place to another; speculation, so far as its foresight is accurate, tends to do this from time to time; though it is not always possible to distinguish the effects of an anticipated change in the rate of interest from those of an increase of risk, as a basis of speculative activity. Just as the function of a produce exchange and its speculation is to steady the price of commodities, so the proper function of a stock exchange and its speculation is to equalize the rate of interest on investment; producing a certain unity in the operations of the money market which we can hardly meet in the market for commodities."

A. T. H.

The Science of Political Economy. By Henry George. New York, Doubleday & McClure Company, 1898—pp. xxxix, 545.

Henry George was a great preacher. *Progress and Poverty* is one of the most eloquent volumes of sermons which has appeared in the English language. But in proportion as George passes from the field of oratory to that of science, his work becomes less good. He criticises his predecessors with no sparing hand; but he lays himself open to the same kind of criticism in far greater measure than they do. With all its claims of novelty, the book has little which is really new, unless it be a somewhat commonplace metaphysics within which the author tries to frame his economic system. Subtract this, and we have simply a new edition of *Progress and Poverty*, less well written, *plus* a number of rather disconnected utterances on money and kindred topics, logical enough when the author sticks close to Smith and Mill, and less so in proportion as he departs from those models. For this reason, it is quite impossible to review the book *in extenso*. This is not the first time that a good preacher has proved himself a poor controversialist. Those of us who have admired George for his brilliant earlier work and for his unblemished personal character can only regret that this last book was ever written and desire that it may be forgotten as soon as possible.

A. T. H.

The National Movement in the Reign of Henry III. and its Culmination in the Barons' War. By Oliver H. Richardson, A.B. New York, The Macmillan Co., 1897—12mo, pp. xiv + 235.

To those general readers who avoid historical monographs as mere dry collections of undigested facts, poorly put together, Professor Richardson's book on the Barons' War will come as a pleasant surprise; and the historical student will find his critical sense fully satisfied in the scholarly way in which the author has used the sources from which his story has been drawn. He has avoided the error of attempting to give "an exhaustive account of the political history of the reign of Henry III.,"—ground which has been trodden many times,—nor has he traced in chronological order, merely, the events which led up to the Provisions of Oxford and the outbreak of hostilities. He has, on the other hand, presented us with a well-thought-out, a well-arranged, a well-written, and an interesting account of the various causes which finally cul-

minated in the "National Movement." By taking as his key-note the "Denationalization of England," he has placed himself in a position for the correct interpretation of materials which have been much handled by his predecessors in the same field.

The book contains three chapters. The first, which is subdivided into two parts, deals with "The Forces which made England a Nation in the Reign of Henry III." Part I, the "Primary Forces," shows how the elements of Anglo-Saxon liberty and nationality, both political and ecclesiastical, maintained themselves after the Conquest. It points out the varying union of parties during the early struggle of institutions and makes clearly manifest the importance of the influence of the English church during the formative period of the Constitution. The church early acquired a national character and a spirit of independence which the changed conditions under the Normans never fully eradicated. "The identity of interests . . . between the masses of the clergy and the people" was never permanently shaken. At the time of the Conquest, the national character of the church was preserved through the fact that the bulk of the lower clergy remained Saxon, and because "the admirable position of William I. and Lanfranc toward one another assured their joint resistance to unreasonable papal demands." This character was never fully lost, in spite of the results arising from the "decree of separation," and in all "the great crises in which the popular liberties were at stake," the church, almost uniformly, championed the cause of freedom.

The second part of the chapter is perhaps the most interesting and, at the same time, the most original part of the whole book. "The Influence of the Friars" deserves a fuller and more logical treatment than is given in either Pauli or Prothero. It was due to this influence that the national instincts, which awoke at the loss of Normandy and won the Great Charter, were "deepened and broadened." The political popularity of the church at this time was not matched by its spiritual influence. In the cities, particularly, its power was lost. It was just at these points that the Minorites did their most effective work. "Their unuttered philosophy of life struck even deeper root than their formal teaching," and to their influence must be traced "the growth of the city commune, which—in London especially—played such an important part in the Barons' War. It can scarcely be considered an accident that exactly in those towns in which the Friars had their firmest seats, the popular sentiment was most directly opposed to papal and royal tyranny."

Their influence was further exerted through the personal friendship which existed between Adam Marsh, a Minorite, Robert Grosseteste, Bishop of Lincoln, and Simon de Montfort. In this relationship Marsh and Grosseteste "were touching, more or less consciously, the very centre of political life and almost the sole hope of political freedom." Their influence on the great leader is clearly shown, and de Montfort, as "the heir of Grosseteste's religious views and political sympathies, and as the practical head of the English baronage, combined in his own person all the highest aspirations of the period, and inevitably became in the fulness of time the head of the national movement."

The second chapter deals with "The Forces which roused England to armed Resistance." "The Denationalization of England" with regard to the state, the relations between the church and the pope, and the relations between the church and the king, is treated in three of the eight parts into which this chapter is divided. Though Magna Carta had broken the absolute power once exercised by the Norman kings, Henry, through the influence of his alien advisers, instituted a reactionary policy and committed himself to a "course of action diametrically opposite to the natural tendencies of the growing nation." His desire to reconquer those foreign dominions, whose loss had made England, England, and his aspirations for absolutism at home soon roused active opposition. From the substitution of subservient foreigners for his English counsellors, it was but a step to the dismissal of the justiciar, chancellor, and treasurer, and the consequent establishment of arbitrary government. "The two fundamental and essential questions of the reign—the maintenance of the Charters and of the exclusive right of the native English to rule in their own land—are strictly complementary and develop *pari passu*." As the struggle progressed, the exclusion of aliens became the critical point of the baronial policy; to them and their wrong-doings were attributed all the political evils of the reign. "They supplemented in the state the great contemporary movement which was denationalizing the church"; a process which began with Honorius and was carried on by abuse of patronage and direct taxation until it reached its climax under Innocent IV. But while this process of denationalization was going on, the forces of resistance were being prepared; the poetical literature was exerting its influence on the people, the alienation of Simon de Montfort and the City of London from the crown was taking place, until, with the king's acceptance of the Sicilian crown for his son Edmund and the excitement of a Welsh

War and the misery of a famine. England was roused to open opposition.

One misses some good reason for the king's outrageous behavior against de Montfort in 1239. Though the chroniclers are silent on the matter, an explanation can perhaps be found, as Pauli¹ suggests, in the political situation of the times. This conjecture finds strong confirmation in the similar charges which were brought against deBurgh.²

The expression, "the recall of Pandulf at Langton's instance," on page 85, is misleading. It is doubtful whether the legate was actually recalled by the pope, and even if so it was not as the result of any direct request from the archbishop.³

The last chapter, "The Outbreak: and the Culmination of the National Movement," is the least original, both in method of treatment and in results obtained, of any part of the book. The final section on "Parties and Principles" has more of independent interest. It is an improvement to take the poem on the Battle of Lewes out of its chronological position, in which Pauli has left it, in order to use it in the final interpretation of the national movement, for, as Kingsford⁴ says, "it is the most complete contemporary statement of the programme put forth by the constitutional party."

W. I. LOWE.

Yale University.

Le socialisme et le mouvement social au XIX^e siècle. Par Werner Sombart, Professeur à l'Université de Breslau. Paris, V. Giard & E. Brière, 1898—18mo, i, 187 pp.

The aim and temper of this work are expressed in the motto which stands on its title page: *Je ne propose rien, je ne suppose rien: j'expose.* The first chapter sketches the psychical, social, political and economic conditions which have given rise to modern Socialism; the second contains an account of Owen, "le plus intéressant des trois grands utopistes;" the third describes the events, between 1789 and 1848, which prepared the way for the later, more definite and conscious "social movement"; the fourth characterizes this movement in its diverse forms, English, French and German; the

¹ Pauli, *Simon de Montfort* (trans. by U. M. Goodwin), p. 40 and note to Quarterly Review.

² Stubbs, *Const. Hist.*, ii, pp. 45-6.

³ Ann. Dunst., pp. 74 and 75; Matt. Paris, iii, p. 66; Stubbs, *Const. Hist.*, ii, p. 34; Pearson, *Hist. Engl.*, ii, p. 128; Shirley, *Pref. to Roy. Letters*, i, pp. xxv-vi.

⁴ *The Song of Lewes*, (edited by C. L. Kingsford, M.A.) p. vii.

fifth contains an exposition of the system of Karl Marx; in the sixth it is shown that the national differences aforesaid are tending to disappear, in "a general adoption of the principal articles of the Marxist program"; in the seventh, the attitude of Socialism toward evolution, political democracy, religion and the fact and feeling of nationality, is discussed; and the concluding chapter contains a vindication of social conflict as wholesome rather than disintegrating, if it be honorable in its spirit and legal in its methods. An Appendix gives a chronology of the social movement in the several countries of Europe, from 1750 to 1896—a unique and useful feature.

W. F. B.

Le socialisme en Belgique. Par J. Destrée & E. Vandervelde, Membres de la Chambre des Représentants de Belgique, Professeurs à l'Université nouvelle de Bruxelles. Bibliothèque socialiste internationale, IV. Paris, V. Giard & E. Brière, 1898—18mo, i, 515 pp.

Belgium has for several reasons a special interest for the student of the "social movement." Among these reasons are the unexampled density of population, the very thorough system of capitalistic production, the marked differentiation of social classes—industrial and agrarian—the low wages and determined strikes, and the confluence and interaction of English, French and German programs of reform, which have characterized the country. This account of Belgian socialism, from a source so authoritative, is therefore very welcome. One of its authors, Vandervelde, has for some years been recognized as a writer of vigorous mind, and as a leader—after de Paepe and Volders, and along with Lafontaine and Anseele—in the socialist propaganda among the Belgians. The other, Destrée, is not so well known, at least by us, but he writes with evident and intimate knowledge of his subject.

The work has two parts, ostensibly separated from one another, but much intermixed in fact. The first is an account of the history and the present condition of the labor and socialist movements in Belgium; the second is an exposition of "Collectivism." The first we have found in a high degree instructive, though rose-colored and sometimes partisan in spirit; the second has less value. The authors have not learned, as many others in Belgium and elsewhere have not, that there is only one program which is properly to be called "socialist," the program of Karl Marx; unwilling to follow this to its logical conclusions, they have fallen everywhere into fallacies and opportunism.

W. F. B.

The Ethics of Hobbes as Contained in Selections from his Works. By E. Hershey Sneath, Ph.D., Professor of Philosophy in Yale University. Boston, Ginn & Co., 1898—xvi, 377 pp.

This little volume is one of the series of six or more, projected by Professor Sneath and prepared by several competent teachers of ethics, for the use of college undergraduates. The attempt is made in each one to set forth the salient features of some modern system of ethical philosophy, in extracts from the writings of its chief defender; thus sending the student to the original sources and with the utmost economy of time and effort. It is a capital idea. And in the case of Hobbes it seems specially, and equally, desirable that the student should know him at first hand, and should be delivered from the task of reading him either in the Latin or Molesworth's edition. He ought to know Hobbes, as being a fountain-head of several of the best and worst notions, in psychology, in ethics, in political theory, of modern times; and he ought *not* to be plunged helpless among the meanderings, the vain repetitions, the contradictions, the dreary controversies, the outworn science, the dull theology, the curious Biblical expositions, of the original writings. From all that, Professor Sneath has saved him. Whoever reads this small book attentively will have, we believe, an accurate and an adequate view of Thomas Hobbes—that lover, and master, of Definition; that “radical in the cause of reaction”; that pious materialist; that intellectual athlete who leaps so easily from the most atomistic individualism to a sort of slavery, deriving a rigid system of social control from the postulate that man is by nature wholly unsocial. It would, perhaps, have been well to add certain excerpts from the two volumes on Liberty and Necessity, partly because the problem of Free-will is so fundamental in ethics, and partly because we have in Hobbes so early and so powerful a statement of the doctrine of psychological determinism. Still, the reader of this work is left in no doubt as to Hobbes' views concerning this vital point.

The body of the work is preceded by an excellent Bibliography—in which there are a few unimportant typographical errors—and by an Introduction. This covers all the essential points, with admirable candor, insight, good judgment, lucidity of style, and brevity.

W. F. B.

The Federalist. Edited, with Notes, Illustrative Documents, and a copious Index, by Paul Leicester Ford. New York, Henry Holt & Company, 1898—8vo, pp. lxxvi, 793.

That a thing may still be done better, no matter how often or how well it has been done before, is illustrated in Ford's edition of the "Federalist." There would seem to have been little room for improvement on the excellent editions of the "Federalist" already existing, yet the new one presents several distinct advantages over its predecessors. Chief among these are the index, which greatly facilitates the study of the text, and the notes containing passages from our history which show how the expectations of the writers in the "Federalist" have been realized or disappointed, and thus add greatly to the interest of the book for the ordinary reader.

Another noticeable feature is the use of two sizes of type, the smaller being used for the less important portions of the text relating to temporary issues, and historical matter now of little value. Also "the date of publication of each number, with the name of the newspaper in which it appeared, has been for the first time obtained and prefixed to each essay."

In the Appendix are given the three national (as distinguished from State) constitutions which have appeared in this country, namely the Articles of Confederation, the Federal Constitution, and the Constitution of the Southern Confederacy in 1861. In the text of the Federal constitution the separate clauses are followed by references to the decisions of the Supreme Court bearing upon them. The Editor's judgment in introducing these references may be questioned. They are very numerous, sometimes filling more than a page; they break the continuity of the text, and make it difficult of use for purposes of reference while reading the "Federalist." The ordinary reader or student is not likely to make any use of them, while the law student or special student of the constitution can easily find them in Desty or Boutwell.

The Appendix also contains the amendments which were proposed by the conventions of several States at the time of adoption, by Jefferson in 1803, by the Hartford Convention in 1814, and by Crittenden and the Peace Conference in 1861. It also contains the text of thirteen other documents of the first importance in connection with the historical interpretation and development of the constitution.

In the introduction the Editor gives at some length his contribution to a settlement of the vexed question as to the author-

ship of certain numbers of the "Federalist." He also gives an interesting and valuable summary of our achievement in constitutional government, rightly giving the place of first importance to those restraints upon the exercise of their otherwise unlimited power which were adopted by the majority for the protection of the minority. "This guarantee to the minority in the federal constitution is one of the most remarkable examples of self control in history, and constitutes its chief claim to preëminence." He also calls attention to the interesting fact that "After a hundred years of testing, the national government stands to-day as the only one which has existed for a century without changes that were in effect revolutionary, and it is the only one able to enforce its laws on seventy millions of people without creating within itself a spirit of resistance and revolt." This success of our government he considers an "expression of what is the cardinal element of good government: a self-controlled people, given to excess in neither law-making nor law-breaking," a worthy tribute to those who framed, and to those who have administered our constitution.

In matters of detail, some of the Editor's opinions may fairly be challenged. Thus, his apparently unqualified approval of a direct election of the President by a mass vote of the people is open to the criticism that this method wholly ignores the States, and neglects the check on fraud which would be supplied by counting the vote by States, giving to each a weight proportioned only to its population, however large its majority for the successful candidate might be. This plan, doing away with the Electors, and correcting the present over-weighting of the small States in the Presidential election, would accomplish the desired reform without increasing the present temptations to fraud.

C. H. SMITH.

Yale University.

Reflections on the Formation and the Distribution of Riches. By Turgot, 1770. Economic Classics, edited by W. J. Ashley. New York, The Macmillan Co.; London, Macmillan & Co., Ltd., 1898—xxii, 112 pp.

Professor Ashley has enriched his valuable collection of Economic Classics by an original translation, made apparently by himself, of Turgot's celebrated essay. He has prefaced it by an interesting account of the life of Turgot, and of the literary history of the essay itself. As originally published, this paper appeared in

the *Ephémérides du Citoyen*, which was edited by DuPont de Nemours, but it seems that the editor undertook to modify the text in many particulars, sometimes changing the thought as well as the phraseology of the author, and though Turgot insisted that a correct reprint should be made, very few copies of this were struck off, and scarcely one has survived. It was thus a matter of considerable difficulty to restore the essay to its original form. The present book, therefore, has a much greater value than a mere translation of an accessible French publication, for the text of the edition of Daire, published as an authoritative edition of Turgot with his works in 1844, was based upon the garbled text of DuPont de Nemours.

The reader is apt to find phrases in any book to which the translator has given a slightly different turn from that which he would have given himself. Thus, the use of the word "properties" as the equivalent of "*propriétés*" would seem to the writer to have been better rendered by the word "estates." "*La Société*" is uniformly translated "the society." Doubtless Professor Ashley would justify this by the consideration that in the first section of the essay, Turgot refers to the inhabitants of "a country," but he is not discussing any particular country, either real or imaginary; he seems rather to be discussing the evolution of capital, labor, and land ownership in society as a whole; so that it would seem to conform more to usage to omit the definite article. "Economic undertakings" is another phrase for which perhaps "business enterprises" would seem a more common equivalent. But as Professor Ashley distinctly states that he has endeavored to produce "something like the effect of Turgot's style; which is indeed inelegant, and sometimes rugged, but yet direct and clear," these expressions may have been deliberately chosen with that end in view.

H. W. F.

Handwörterbuch der Staatswissenschaften. Zweiter Supplementband. Herausgegeben von Dr. J. Conrad, Dr. L. Elster, Dr. W. Lexis, Dr. Ed. Loening, mit Register zum ersten und zweiten Supplementband, bearbeitet von Dr. Paul Lippert. Jena, Gustav Fischer, 1897—x, 1076 pp.

The second supplementary volume of this valuable work shows some of the same peculiarities which were commented upon in reviewing the first volume, in the number of this REVIEW for

February, 1896. It was mentioned at that time that the articles in the first volume were on an average much longer than those of the six volumes of the original work. In the present volume they average still longer, there being only 79 articles, as against 106 in the first supplement. Many of these are strictly supplementary to earlier articles, and, as it were, bring them down to date. This is true of the excellent article on Workingmen's Protective Legislation (*Arbeiterschutzgesetzgebung*), on Strikes (*Arbeitseinstellungen*), Trade Unions (*Gewerkvereinsbewegung*), and on the Currency Question (*Währungsfrage*). It still remains remarkable, however, that nothing new should be found to be said on the subject of Railroads, although there is an article entitled "Kleinbahnen." And there are several articles which seem to belong to an historical encyclopedia rather than to a work of the character of the present, and which, if they appear at all, would seem much more appropriate in one of the original volumes than in the supplement. In this class are found articles on the Gracchic movement in Rome, the Agrarian relations in antiquity, the Roman and Greek colonizations, the Plebs, etc. The insertion of such articles may possibly indicate the difficulty of publishing at such frequent intervals large supplements of a thousand pages. We welcome, therefore, the announcement of the publishers, that they are about to issue an entirely new edition of the whole work, in seven volumes. This probably means the condensation or elimination of considerable surplus matter, and the recasting of the rest. Even the type of the new edition is to be changed, and Roman instead of German text is to be used, doubtless to the gratification of persons who are unfamiliar with German or who suffer from weak eyes. It must be as gratifying to the general public as it is to the publishers that such an extremely valuable work, prepared in the scientific spirit and on a lavish scale, should have met with a complete success. It is all the more gratifying to learn that the completion of the new edition is promised for 1900, and that the publishers are willing to take copies of the first edition in exchange for the volumes of the new edition, allowing 36 marks apiece for them.

H. W. F.

THE
YALE REVIEW.

NOVEMBER, 1898.

COMMENT.

The Scope and Effect of the Anti-Trust Act; David Ames Wells.

IN 1799 and 1800 the English Parliament passed the notorious "Combination Acts." By these laws, all combinations of laborers for the purpose of bettering their condition were declared illegal, and stringent penalties were provided for any violation of this principle. The mere act of a few independent workmen in agreeing with one another that they would not accept less than a certain rate of wages was judicially treated as a "conspiracy against the whole world" and punished accordingly. As late as 1834, some Dorsetshire laborers were transported to Botany Bay for the mere act of forming a labor union, which had committed no act whatsoever that could be construed as prejudicial to the public interest.

We have been accustomed to cite these decisions as evidence of the arbitrary character of English law as passed by an unreformed parliament and administered by reactionary judges. We have been accustomed to think, with somewhat pharisaical self-satisfaction, that we never were as bad as England in these respects. Yet an act passed by Congress as recently as 1890 applies, in a somewhat different field, the principle of the Combination Laws of George the Third; and the consequences of this act, as set forth in recent decisions of the United States Supreme Court, are, if possible, yet more irrational than those of its English prototype.

To understand the case properly it is necessary to go back a little into past railroad history.

Prior to 1870, railroad freight charges in this country were in a parlous state. Our roads nominally had a freight tariff; but they used it so rarely, that the charge made for their services was in practically all cases a matter of special bargain. In the investigation made by the Hepburn Committee a few years later, the general freight agent of the New York Central railroad found it hard to name a single shipper who paid tariff rates for his goods. All this uncertainty was due to the irregular action of competition. The agents of the railroads, being charged with the duty of getting business by every possible means, made secret rebates and special bargains; knowing well that, unless they adopted these means to secure traffic, the business would go into the hands of their less scrupulous rivals. It was in the power of the worst managed and most short-sighted road to dictate the policy of all its competitors.

To meet these evils the system of pooling was adopted. A pool really involved two distinct parts; the formation of a joint schedule of rates at competitive points; and a division of traffic in order to remove the temptation to violate the rate agreement. The latter may seem to have been an unnecessary provision; but at the time when it was first put into use it was quite indispensable. For no rate agreement at competitive points is ever kept with absolute strictness. Even if the principals intend to live up to it, their agents have a thousand different ways of attracting traffic by special concessions, and violating the spirit if not the letter of the agreement. Now if each road gets the benefit of the irregularities of its own agents, the officers of the other roads will suspect it of bad faith; but if each road is awarded a percentage of traffic based either on its facilities for handling such traffic, or on the amount of such traffic which it has handled in the months immediately preceding, the ground for such suspicion is removed.

It was for this purpose that division of traffic was arranged; and it was fairly successful in accomplishing its object. The Chicago-Omaha pool was established in 1870; the Southern pool in the years 1872-1874; the trunk line pool in 1877-79. In spite of occasional failures, the period of operation of these pools was one of great progress in systematizing railroad freight

charges. The irregularities and special bargains in 1886 were far less than in 1869; and the legal authorities, judging pools by their effects on traffic management, began to regard them with increased favor. One has only to look back in a pamphlet like Judge Cooley's *Popular and Legal Views of Traffic Pooling*, published in 1884, to witness the growth of this sentiment. But in 1887 the Interstate Commerce Act made all divisions of traffic misdemeanors, and deprived the railroad managers of this means of buttressing their agreements. A period of great demoralization in rates ensued. Hardly was this over when the anti-trust act of 1890 was passed, which went a step farther back and prohibited the rate agreements themselves. It is this act on which the recent decisions against the Trans-Missouri Association and the Joint Traffic Association are directly based.

What had these associations done? Had they formed a pool or division of traffic in violation of the Interstate Commerce Act? None whatever. Had they made an agreement to raise rates to an unreasonable figure? Far from it. In fact the Supreme Court, in pronouncing its verdict against the Joint Traffic Association for violation of the act of 1890, says that we may trust to the good sense of the managers to do, without an agreement, the things which the agreement itself is intended to promote.

But surely, the reader will say, if the law prohibited an agreement for a useful end, this agreement must have contained some clauses and some penalties whose enforcement was against public policy. Not at all. The Trans-Missouri agreement simply provided that any road which abandoned the contract should not remain a member of the association. The trunk-line agreement did not even go as far as this; it simply provided that a schedule of rates jointly adopted as reasonable by a number of competing lines, should not be abandoned by the *agents* of one line without a resolution of the managers or directors of the road in question. It left each company absolutely free to do as it pleased, simply providing that a departure from the scheme of joint action should be signalized in a public and formal manner. It is this requirement of publicity and responsibility which is now declared illegal. It is a mis-

demeanor for the different roads to agree to do jointly a thing which it is not only proper, but salutary for them all to do without such joint action. Matters have come to the pass which they reached in the case of the English laborers alluded to at the beginning of the article—when the joint action is in itself an offense against the law, no matter how innocent its means or how salutary its objects.

It should be said in all fairness that the Supreme Court is not to blame for this conclusion. It is easy to read between the lines that they do not particularly approve of the consequences of their decision, but are forced by the language of the statute to make it what it is. It has been said that the best way to get rid of a bad law is to enforce it. Let us hope that such may be the result in the present instance.

The trend of these laws and decisions is all the more remarkable when we consider the opposite character of the legal development of England during the same period. While we have been moving in a direction adverse to trade combinations, English law and English practice has come more and more to favor them. While our courts hold that the mere agreement to make reasonable rates is under existing statutes a misdemeanor, the English courts, as in the celebrated "Mogul Steamship Case," will allow the enforcement of such agreements by methods little short of conspiracy. In the case alluded to, several lines attempted to destroy the business of a company which insisted on keeping outside of the combination which the others had formed; and the English courts, recognizing such combination as legitimate and inevitable, were disposed to allow the members of the combination great freedom in making it uncomfortable for outsiders. The same difference between England and the United States is seen in the attitude of the courts toward combinations of laborers. In England they are treated as *prima facie* legitimate; in America, they are treated as violations of the anti-trust act. In the former country every facility is offered for their development; in the latter, every obstacle is placed in its way. In fact, as has been already pointed out in these columns, this whole body of anti-trust legislation, which was intended to attack capitalists, has proved even more severely burdensome to such of the laborers as came in contact with it.

Mr. Wells, who died on the fifth of November at the age of seventy, occupied a position almost unique among economists. Most of those who have made a name for themselves in this science may be divided into two classes, those who have taken up the study as a pastime, and those who have taken it up as a profession. Many pioneers of the science, such as Turgot, Ricardo, Malthus, and James Mill, and some of their followers too, like John Stuart Mill and Henry C. Carey, not to speak of a few of our own contemporaries, may be put in the former class. They were men who were normally engaged in the activities of public office, business, or a profession, but who were able to think and write on economic subjects in the time saved from their regular callings or after their retirement. Most modern economists, however, fall in the professional class. They are usually teachers or government statisticians who make of economics their life work.

With David A. Wells, political economy seems to have been neither a pastime nor a profession, but a necessity. He did not set out to be an economist, nor did the pursuits of his earlier life seem to point in that direction. Like Gen. Walker at a later period, he served his literary apprenticeship on the *Springfield Republican*, but his tastes seem to have run, in the main, to science. He soon entered the Lawrence Scientific School, and upon his graduation in 1852 was appointed assistant professor in this institution. For a dozen years he was known as the author of successful popular scientific works. It required the storm and stress of the Civil War, with its dark financial outlook, to force economic topics upon his attention, and it was at the comparatively mature age of thirty-six that he published the article on "Our Burden and Our Strength," which at once changed his whole career. This treatise led President Lincoln to appoint him chairman of a special commission to consider the subject of raising, by taxation, the revenue necessary for the Government, and this was the first of the series of steps by which he gradually progressed in his grasp of practical economic problems, and in fame as an economist.

His appointment as Special Commissioner of the Revenue in 1866 brought him to the study of internal revenue taxation. In 1867 he was commissioned by the Secretary of the Treasury to prepare a draft for the revision of the tariff, and this brought about a complete change in his views on this subject. Though by inheritance and education a strong protectionist, the independent study which he made of tariff problems brought about a complete change in his views and made him from that time on, until the end of his life, a pronounced and aggressive free-trader. As Chairman of the New York State Commission on Taxation, appointed in 1870, he was now brought to study the property tax and to take what was, at that time, the very radical view that our States ought to abandon all effort at taxing personal property.

Though he filled many important positions in the business world after this time, he held no permanent political or academic office, but the many public problems which pressed for solution kept him in the front rank of economic authors, and his popular treatises on free-trade, on the currency, on the merchant marine, and other timely topics, gave him a well deserved reputation as a pamphleteer of originality and power. His more extended compositions, such as his work on *Recent Economic Changes*, published in 1889, and the articles on Taxation, published more recently in the *Popular Science Monthly*, showed him to possess an almost unequalled command of economic facts and a wonderful power of grasping their significance when interpreting the great movements of our day. His conclusions always seemed to rest upon the solid foundation of experience and observation. Though familiar with economic theory, he was not by nature a theorist. But he was a great interpreter of economic phenomena, whose loss will be sincerely felt by thinking men, whether they agree with his views or not, and whose place will not soon be filled.

THE COIN SHILLING OF MASSACHUSETTS BAY.

I.

SILVER plate was first rated in 1640, at five shillings per ounce sterling, .925 fine.¹ The English mint price for silver, after 1601, was 5s. 2d. per ounce, but it seems to have been believed in Massachusetts that it was still five shillings. Strange as this error appears, it is supported by an incidental statement of Hutchinson² that he owned several shillings of the reign of Charles I, which weighed four pennyweights each. No mention of any such coins occurs in Ruding, but he says that, in 1631, "Many of [the money weights] which were in common use (although they were marked with the King's ensign) were too heavy, and others too light, so that men bought and received by one weight, and sold and delivered by another."³

From the first year of the settlement rates were set at which commodities could be tendered in payment of taxes. In the following years the system of barter rates was extended to private transactions, so that there was a multiple currency, out of which that one thing was chosen, and became the money of account, which enabled a debtor to discharge his obligation with the least sacrifice. Hence arose a barter shilling, by the side of which was placed, by the law of 1640, a coin shilling, or bullion shilling of silver, which contained 96/88.8 grains,⁴ while a shilling sterling was only 92.901/85.934 grains.

In 1642 the Court ordered that ducatoons of three gilders should be current at six shillings, rix dollars of two and a half gilders and pieces of eight at five shillings.⁵ What ducatoons were, in 1642, we do not know. Sir Isaac Newton found them, in 1703, if of Holland, worth 65.59 pence sterling, .937.5 fine; if of Flanders, 66.15 pence sterling, .943.75 fine.⁶ The three gilder

¹ *Col. Rec.*, 294. ² *Bost. Evg. Post*, Jan. 14, 1762. ³ *1 Ruding*, 386.

⁴ The first number is the gross weight, the second, the fine contents.

⁵ See the *Discourse Concerning the Currencies of the British Plantations*, 1740, in the *Overstone Tracts*: reprint edited by C. J. Bullock, 1897, who attributes it to Douglass.

⁶ *23 Gent. Mag.*, 6.

pieces of Holland are not called ducatoons by him. They were worth 62.46 pence sterling, .916.66 fine. There was a great number and variety of rix dollars. The one referred to in the Massachusetts law was probably the "Patagon leg dollar or rix dollar of Holland, or piece of 50 styvers" of Sir Isaac Newton's table. This was worth, in 1703, 52.28 pence sterling. It was then only .866.66 fine. If it had been .925 fine it would have been worth 4s. 7d. 2.8f. A rix dollar current in London, in 1626, was worth, by weight and assay, 4s. 7d. 2f., but was current at two pence less, being mint charge and broker's commission, and the piece of eight, worth by mint test 4s. 6d. 1f., was current there at two pence less, for the same reason.¹ Of the three coins mentioned, the piece of eight was by far the most important for Massachusetts, being obtained already by trade with pirates and with Jamaica. It was also overrated relatively to the other two in the law of 1642, and therefore displaced them. Cotton found it to be 420 grains in weight, but of varying fineness, .916.66 to .925. This coin being rated at five shillings, the shilling of Massachusetts was reduced to 84/77.7 grains. In fact, however, all the pieces of eight in circulation were more or less clipped and, although Cotton found them up to sterling standard in 1626, others disputed it then, and later in the 17th century they fell below it.²

The presence of barter currency and of wampum by the side of silver, forced a constant exportation of the latter, or the clipping of such coins as remained. The barter currency was called "pay" or "country pay," which meant that it was the money of account. "Country pay became the general measure throughout the government." It was 30 or 40 per cent. below sterling in 1642.³ This barter shilling then would correspond to a silver shilling of 65.03/60.15 or 55.74/51.55. It constantly and steadily depreciated. "Silver in New England," said Cotton Mather, "is like the water of a swift running river; always coming and as fast going away."⁴ The accepted explanation of this phenomenon was the balance of trade and the colonial

¹ Cotton, *Posthuma*, 296.

² Sumner, *The Spanish Dollar*, *Hist. Rev.* July, 1898.

³ Hutchinson, *l. c.*

⁴ Trumbull in *Am. Antiq. Soc.*, 1884, 275.

relation. The facts just stated, however, show that a $12\frac{1}{2}$ pennyweight dollar could barely remain in circulation. "By the middle of the 17th century, clipping was rampant in the West Indies, and light Spanish silver coins became the general standard of value in the British possessions of the new world. As far as can be learned, Jamaica and New England took the lead in these proceedings." The current piece of eight was down to 336 grains.¹ Inasmuch, however, as the barter shilling was constantly depreciating, and the silver coins were being clipped to keep pace with it, this "standard of value" hardly deserved the name. While the barter currency was the money of account, the money of ultimate reference for it was uncertain, depreciating, and indefinable. It was of foreign manufacture. It was not made with accuracy or regularity. It was rated in a traditional English denomination to which it did not fit. It was not rated at its sterling value, but arbitrarily, so that the definition of a colonial shilling was derived, not from a sterling shilling, but from it, and the relation to sterling was a deduction. It was being clipped all the time.

The inconveniences of this complicated set of relations led to the project of establishing a mint at Boston. Probably, however, the hope of preventing exportation by recoinage was the more immediate motive. This hope was vain. Recoinage could have no effect on the forces which caused exportation, but it could render the English colonists independent of the errors of the Spanish mints. In an address of Massachusetts to the King, 1684, a passage was inserted to apologize for the establishment of the mint, which passage was stricken out on final revision. The excuses alleged were that they had no exports but bulky corn and fish, "and therefor, for some years, paper bills passed for payment of debts, which are very subject to be lost, rent, or counterfeit, and other inconveniences. There comes in a considerable quantity of light base Spanish money, whereby many people were cozened, and the Colony in danger of being undone thereby, which put us upon the project of melting it down and stamping such pieces as aforesaid to pass in payment of debts amongst ourselves." The Act for the

¹ Chalmers, *Colonial Currencies*, 8.

mint, as first drawn, also contained a preamble which was omitted on revision: "Forasmuch as the new order about money is not well resented by the people, and full of difficulties, and unlikely to take effect, in regard no persons are found willing to try and stamp the same."¹ The reference here is to some order about money which is not in the record. It appears to mean that they intended at first to reduce the coins to bars which should be stamped. The first ordinance for the mint provided that the coins should be flat and square.²

A Committee of the General Court was appointed, in 1652, to "appoint the mint house." They reported that it should be 16 feet square and 10 feet high; that the Colony should provide the plant, that a man should be impressed to build the house, and that he should be authorized to impress help.³ In order to prevent washing and clipping, the law provided that each coin should have a double ring and "Massachusetts" on the margin, and a tree in the center, on one side, and New England and the year of Our Lord, on the other, a picture being drawn on the margin of the page to elucidate the enactment.⁴ The provisions of the mint law are confused and contradictory, in fact they are unintelligible without information of a supplementary agreement between the Committee and Hull, the mint-master, which is not incorporated in the law.⁵ Crosby⁶

¹ *Hull's Diary*, 3 *Am. Antiq. Soc.*, 282; 1 *Hutchinson*, 164.

² Atkins (*Coins of British Possessions*) says that silver "planchets" were in circulation before 1651, which bore on one side "N. E." and on the other XII, for twelve pence. They are depicted in Crosby. Stickney (2 *Essex Inst.*, 99) says: "Shillings have lately appeared dated 1650; these, if not the work of modern artists, must * * * have been patterns struck in England. They are of superior workmanship to those adopted in 1652, and might have been rejected on account of the expense attending their execution. That experiments were made with a view to copper coinage is evident, as I have one of Massachusetts, dated 1652, of pure copper, presenting no appearance of being a counterfeit, and is the only one that I ever saw." [?]

³ 3 *Am. Antiq. Soc.*, 286.

⁴ IV. 1. *Col. Rec.*, 104. An attempt has been made (I. 3 *Hist. Mag.*, 197) to show that the two rings and the tree were occult symbols, based on Old Testament texts, the significance of which to Puritans was: "God protecting New England," and "Independence."

⁵ It is approved but not rehearsed, IV. 1. *Col. Rec.*, 118.

⁶ *Early Coins of America*, 34.

gives a heliotype reproduction of the manuscript law. It is a slovenly scrawl, with erasures, superposed corrections, interlineations, and amendments, resulting in one case in an illegible blur at a material point. The mint-master was "for value to stamp three [erased and two substituted] pence in a shilling of lesser value than the present English coin." The upper House at first allowed for mint charge 18 pence in 20 shillings; this the Deputies reduced to one shilling, and so the law provided, as it was passed. It further provided that for silver brought in by anyone "the mint-master shall deliver him the like weight in current money, viz: every shilling to weigh three penny troy weight and lesser pieces proportionably, deducting allowance for coinage as before expressed." It was strictly enjoined that the coins should be of sterling alloy.

It is impossible to reconcile these prescriptions with each other. According to the usual slipshod colonial method of doing business, no fair copy having been made, inconsistencies which resulted from amendments stand in the document unadjusted. Analysis and comparison lead to the following conclusions. They supposed, as we have seen above, that the English mint price for silver was five shillings per ounce; i. e. 96 grains sterling for a shilling. They meant to make a shilling equal to nine pence sterling on that supposition, i. e. 72 grains or 3 pennyweights. Hull and his partner, Sanderson, would not agree to the reduced allowance for mint charge. The Committee consented to raise it to 15 pence per 20 shillings, and to allow one penny per oz. for wastage. Inasmuch as 20 of the proposed shillings would weigh just 3 ounces, this carried the total mint allowance up to 18 pence per 20 shillings again. The Committee consented to this very reluctantly, and until the next session only, expressing the hope that the mint-master would find that he could afford to take less. He was to reduce all silver to standard, and to coin it, at the uniform price agreed on, for the Committee urge that "there is likelihood of several kinds of work in which he is to be employed where there is no refining and so less labor."

Specimens of the coins which have been tested weighed 61, 65, 67, 70, and 72 grains. An assay at the mint of the United

States showed fineness .926.¹ Cuts of the coins are given in 3 *Am. Antiq. Soc.* Milling was not introduced in England until 1660.² No evidence has been found that it ever was introduced in Massachusetts. Consequently filing or clipping cannot be detected, and as the coins were all subject to it, very few perfect specimens exist. The deficiency of weight in those just mentioned is no proof that they were not of full weight when issued. On the contrary, the one which shows the maximum weight no doubt shows the normal weight. It is true that the coins are said to have passed abroad at three-fourths of sterling,³ and that a Board of English Commissioners, in 1655, stated that the metallic value of New England coins was 25 per cent. below sterling of the same denomination,⁴ also that one of the complaints made, about 1661, against Massachusetts, was for recoinng English coin at a reduction of one-fourth;⁵ but Randolph, in 1676, said that the New England shilling weighed three pennyweights and was worth 9¼ [9.3] pence sterling,⁶ and a Report of the English Mint, in 1684, stated that the alloy of the coin was correct and that it was 22½ per cent. below the English shilling.⁷ The intention was to put the New England standard 25 per cent. below the English, supposing that the latter was 96 grains for a shilling. In fact it was 92.9 grains, so that a shilling of 72 grains was 77.5 per cent. of it. There remains no doubt then, that the pine tree shilling, as it came from the mint, weighed 72 grains, .925 fine, pure contents 66.6 grains. Those prescriptions in the mint law which are inconsistent with this are the ones which must be sacrificed. The mint selling price, and the basis of the silver currency (the pine tree rate), was 6s. 8d. per oz. The metallic par of exchange with sterling was 129 for 100. To get these coins, however, the individual who brought silver to the mint must pay 18 pence per 20s., that is 5.4 grains of standard silver per shilling, or 7½ per cent. for mint charges; the cost to him, therefor, of a 72 grain shilling was 77.4 grains of silver, or the mint buying price

¹ 1 *Essex Inst.*, 125: 2 ditto, 100, 206.

² 2 Ruding, 7.

³ Felt, 32.

⁴ 13th *Rep. Hist. Mss. Comm.*, App., Pt. II, 94.

⁵ *Cal. State Pps. Colon.*, 1661-8, 26.

⁶ *Hutchinson Pps.*, 480.

⁷ 3 *Amer. Antiq. Soc.*, 302.

was 6s. 2.418d. per oz. The heavy mint charge depressed prices in the coins, and the law (probably in vain) prohibited the circulation of any other except English, which, however, could not legally be exported from England. No one would take bullion to the mint unless a 72 grain coin would buy as much as 77.4 grains of bullion in the market. The latter amount was therefore the effective shilling in the market.¹ It was also forbidden, in 1654, to export silver to a greater amount than 20 shillings, by one person, at one time, for personal expenses, the penalty being confiscation of all visible estate, one-third to the informer.²

The amount of silver coined in the first years of the mint was large.³ The coins spread all over the northern colonies, yet they never were the current ordinary money of account even in the towns; far less in the country. The Chisholm accounts of Harvard College, kept in detail from 1650 to 1659, show few payments in silver.⁴ The coins were all dated 1652 as long as the mint lasted. The mint house was on land owned by Hull, but which was to be transferred to the Colony at a valuation upon the expiration of his contract.⁵

The charter of Massachusetts Bay did not contain a grant of the power to coin, and there was some fear, after the Restoration, of the consequences of assuming it. The power to coin was granted in the letters patent of Virginia,⁶ and this shows, although the power was not granted in the second charter, that power to coin was not considered inconsistent with the colonial relation. The Colonies paid little heed to the charters when those documents would have limited them in the exercise of power, although they insisted strenuously on the restrictions to which, in the charters, the Crown had pledged itself in dealing with them, but the Sovereign had really no reason to object to the mint, except on account of the prestige of coining as a sovereign prerogative. It was one of the greatest mistakes in

¹ It is noteworthy that this is just ten pence sterling.

² It was, at this time, not allowed to export precious metals from England. The prohibition, except as to English coin, was revoked in 1663 (2 Ruding, 11).

³ 1 Hutchinson, 78.

⁴ 1 Weeden, 191.

⁵ Drake, *Boston*, 329.

⁶ *Cal. State Pps. Colon.*, 1606, 33.

the colonial policy of England that a colonial mint was not allowed. The demands of the King's Commissioners in 1665 are all in the interest of civil liberty and the rights of the oppressed, except their demand for the abolition of the mint.¹ The people of Massachusetts Bay had shown a spirit of disregard of their relation to the mother country, and had far exceeded their powers as a chartered corporation. The mint was regarded as an overt act of usurpation, more important as a proof of temper and purpose than in itself. A legend of probably only poetic value narrates that Sir Thos. Temple, apologizing for New England, told the King that the pine tree was the royal oak, whereat the King laughed.² Temple narrated "merrily" the story of his interview with the King, whatever it was.³ The Colony, in 1678, begged the King's indulgence for the mint and asked him to prescribe such impress for the coins as he pleased. The complaints of the mint during the first thirty years do not refer so much to its constitutionality as to the standard of its work. In the King's letters to the Colony, 1679 and 1680, he does not mention it. If the coins had been made in accordance with the English mint ordinances, and if, after the Restoration, the King's effigy had been put on them, it appears that other objections would have been regarded as trivial.⁴ When it became desirable for the Crown to vacate the charter, in view of the political system which had been created under it, contrary to its purport, the mint was a welcome addition to the specifications by which the legal proceedings could be supported.

When the mint was established, the rating of the piece of eight was, as we have seen, five shillings. The maximum weight of the coin fresh from the mint was 420 grains, assumed to be of sterling alloy. The same rating was repeated in 1655. At that rating there was an advantage in taking the piece of eight to the mint to be recoinced, under the new law for the provincial mint, for the mint charge on 420 grains was 31½

¹ IV. 2. *Col. Rec.*, 213.

² The King was in the oak Sept. 6, 1652, and the mint law was passed Oct. 26 (3 *Am. Antiq. Soc.*, 293, Ed. note).

³ 1 *Maine Hist. Soc.*, 398.

⁴ 1 Hutchinson, 165.

grains or $5\frac{1}{4}$ pence colonial. The full piece of eight would therefore produce at the mint 5s. 4d. 3f. colonial. A lighter one, if it would pass at five shillings colonial, would not offer so much advantage. The point of indifference or equality was when the piece of eight weighed 389.18 grains of sterling alloy. Below that weight, if it would pass at five shillings, there would be a loss in having it recoin. The circulation of light clipped coins must have been stopped after the mint was established, probably by the hearty coöperation of the public with the policy under which the mint was set up, for otherwise there would have been no large recoinage in competition with the clipped coinage. The mint law therefore raised the coin shilling from what it had been under the clipped coins to $72/66.6$ grains.

The mint charge was not abolished in England until 1666.¹ It was a preventive of exportation from America while it lasted, and assisted, by so much, the people of Massachusetts, in what they were trying to do. The more a man must lose on his piece of eight to make it effective in the English market, the more he was willing to lose to make it effective in the American market before exporting it. There was a constant tendency to bring into the circulation at five shillings each those pieces of eight which were just below the point at which there was neither gain nor loss in recoinage, that is, just at and below sixteen pennyweights. Such were by far the greatest number of the best to be met with. The heavier pieces were culled for export. After the first enthusiasm in favor of the Massachusetts coin had passed away, the motive of interest had its way unchecked to realize this tendency. "In sundry of our colonies were enacted laws against passing of light pieces of eight. These laws not being put into execution, heavy and light pieces of eight passed promiscuously, and, as it always happens, a bad currency drove away the good currency. Heavy pieces of eight were shipped off. This current money growing daily lighter, a difference was made between heavy money which became merchandize, and light money, in which they paid their debts, gradually* [during the latter half of the century] from 10, 15,

¹ 2 Ruding, 12.

20, to 25 per cent. . . . This was another and continued course of cheating their creditors and employers at home."¹

A committee of the General Court was appointed, in 1660, to try to get from the mint-master a payment for the privilege he enjoyed, under a threat to contract with somebody else.² This committee reported that the gains of the minters were £62 on every £1,000. The total mint charge was £75 on £1,000. The wages of the minters are evidently here counted into their "gains." The committee asked Hull to pay to the Colony one-twentieth of £62 per £1,000. He refused, probably because he saw no reason to surrender the advantage of a natural monopoly, but he offered a single gift of £10. This the committee refused, but the General Court, more thrifty and less haughty, ordered them to take it. Hull made a great fortune for the time,³ probably not altogether from the mint. Any man who understood the mysteries of coinage, money and bullion brokerage, and assaying, had a greater chance of gain than any other person in the Colonies who had to seek it by industrial effort. The democratic state was as much seduced by the "seigniorage" to be won from coining as any medieval prince ever was. It did not desire to abolish the excessive mint charge. The following year it repeated the attempt to get a share of it. It was hoped, at least, that rent might be obtained for the house and plant, but the attempt failed.⁴

Two-penny pieces were added to the coins in 1662. For the first year £50 in these pieces were to be struck for every £100 coined, and for the six years following, £20 for every £100.⁵ Silver was quoted in 1665 at 6s. 8d. per oz., and gold at £5 per oz.⁶ The ratio would be 15.13 to 1, if account should be taken of the difference in fineness of the two medals (gold .916.66), but disregarding this, as the colonists seem always to have done, the ratio was 15 to 1, and gold was at two and a half silver pence per grain, silver being the money.

¹ *Overstone Tract* of 1740. ² IV. 1. *Col. Rec.*, 434; 3 *Am. Antiq. Soc.*, 291.

³ 1 Hutchinson, 165. Probably he is the merchant referred to by Hutchinson (*Bost. Evg. Post*, Jan. 4, 1762) as having died possessed of a fortune of £30,000.

⁴ IV. 2. *Col. Rec.*, 13. ⁵ *Ibid.*, 51; see II. 2. *Mass. Hist. Soc. Coll.*, 274.

⁶ 1 Weedon, 316.

The abolition of the mint charge in England, in 1666, altered the conditions of the New England bullion market so that a less unfavorable rate of exchange was necessary to take silver away. If we may make use of Sir Robert Cotton's statement of 1626, about the loss of value on a piece of eight in London, to assume that the cost of freight, insurance, mint charge,¹ and brokerage at this time would be two pence sterling per piece of eight sent from Massachusetts, then the effective shilling in London for such a shipper would be 96.34 grains. As we have seen above, the effective shilling in Massachusetts was 77.4 grains. The exchange rate between the two would be 125 colonial for 100 sterling. If then the mint charge in England was abolished and the effective shilling sterling for an American shipper of pieces of eight fell to 93.33 grains, the rate would be 120½ colonial for 100 sterling. Consequently exportation would increase, and the amount of metal taken to the Boston mint would diminish. We may believe that this effect made the mint men more amenable, for, in 1667, they agreed to pay £40 within six months, and after that £10 per annum, for seven years, the contract being renewed for that period.²

The law against the exportation of coin was renewed in 1669, which is a proof that exportation was going on at a rate to renew the agitation against it. Until 1670 the Colony enjoyed prosperity under free trade.³ Then attempts began to be made to enforce the Navigation Acts, and twenty years of strife with the Crown followed, producing hard times. These circumstances led to numerous projects about the currency. It was provided, in 1670, that specific contracts for coin or merchandize should be discharged according to their terms.⁴

A proposition was first made in 1669 to repeal the law which forbade the circulation of all foreign coin except English, and to make pieces of eight of sterling alloy current at six shillings each.⁵ It was not until 1672, however, that this action was

¹ The mint charge was two shillings per pound, which would be 1¾ pence on a piece of eight of 420 grains. Of course the assumption here made is not true to the facts, which we have no means of ascertaining. It is only made in order to show the effect of abolishing the mint charge.

² IV, 2, *Col. Rec.*, 333, 347; 3 *Amer. Antig. Soc.*, 295. ³ I Hutchinson, 269.

⁴ Felt, 41.

⁵ Felt, 41.

taken. It was forced by the change in the adjustment with the English market. The preamble recites that "pieces of eight are of more value to carry out of the country than they will yield to mint into our coin." Therefore, it was ordered that all such pieces which were of full weight and good silver, "that is six shillings of New England money of Mexico, Seville and Pillar" should pass for six shillings, provided that they were stamped "NE." at the mint, to certify that they were of due weight and alloy. The mint charge for stamping was to be four pence on 20 shillings, one penny to the minter and three to the public treasury.¹ Pieces of eight which would equal six New England shillings would weigh 432 grains. No such pieces ever existed. Accordingly, later in the session, "forasmuch as few or no pieces of eight are of that weight," it was enacted that any pieces of eight should be stamped their weight, and should pass at the rate of 6s. 8d. per oz. Worn pieces stamped with NE and figures are to be seen in collections.²

The charge for stamping was $\frac{1}{60}$ of a grain per grain. A full weight dollar (420 grains) would therefore net the owner, when stamped, 5s. 8 $\frac{5}{6}$ d.; if minted, 5s. 4 $\frac{3}{4}$ d. Any piece of eight could be stamped with its New England value, and be so rendered current, for $1\frac{2}{3}$ per cent. of its value. It could be minted for 7 $\frac{1}{2}$ per cent. of its value. Evidently none would be taken to the mint. Stamped pieces plus the stamp expense made 73.2 grains the effective shilling instead of 77.4 grains. The new metallic par with sterling was 126.9. Crosby³ does not believe that any pieces of eight ever were stamped under this law. He would refer the specimens seen in the collections to the period just before the mint was founded. The calculation just made shows that he must be in error. It shows a motive which would be sure to cause coins to be stamped. A Peruvian piece of eight of 1652 has been described,⁴ which is stamped. It was found in a buried hoard with other coins of which the latest date was 1688. This law of 1672 overthrew the mint. We hear more and more complaints that it does not or cannot work. Some have supposed that Andros stopped it.

¹ IV. 2. *Col. Rec.*, 533.

³ 3 *Am. Antiq. Soc.*, 296.

² *Early Coins of America*, 81.

⁴ 2 *Essex Inst.*, 254.

Crosby thinks that the contract was not renewed in 1675. When we find that the laws and conditions would cause a comparative loss to anyone who brought silver to the mint, we may be sure that we have found the correct explanation of its stoppage.

The contract of Hull and Sanderson expired in 1675. A committee was appointed to treat with anybody for a new period, but the same men made a new contract for seven years more. The mint charge was reduced to fifteen pence per 20 shillings, and the contractors were to pay £20 per annum for their privilege. They bought the mint house.¹ The lowered mint charge was equal to 1/16 of a grain per grain, or 6¼ per cent. On a 420 grain dollar this would be 26¼ grains, and such a coin would produce at the mint 5s. 5⅞d. New Eng. The buying mint price was 6s. 3.28d. per oz. and the cost of a shilling (72 grains) was 76.5 grains. A stamped price of eight, however, would still pass current as before, and its cost was, as above, 73.2 grains per shilling of 72 grains. This combination, without bringing any metal to the mint more than before, ensured export or clipping of the New England shillings and importation of base or clipped dollars. Very little attention was paid to the fineness of the Spanish coins, which now became uncertain. Especially the Peruvian dollars were a cause of fraud and annoyance. We must also not lose sight of the barter currency which constantly tended to degrade the coin. At the time which we have now reached, a conventional difference of one-third was recognized between money and "pay," in the payment of taxes, that is, one-third off barter rates gave money rates. This, however, in private transactions meant "pay as money." It was necessary to subtract twenty-five per cent. more to get coin rates.² If a minister's salary was £100, he was paid in grain which could have been bought in the market for £50 in silver. Randolph reported, in 1676, that there was a reasonable supply of silver in Massachusetts, but little gold.³

Various projects were brought forward in 1678 to prevent the exportation of metal and to cause it to be brought to the mint,

¹ 3 *Am. Antig. Soc.*, 297.

² Judd, *Hadley*, 210.

³ *Hutchinson Pps.*, 498.

testifying to the points in which contemporary experience was unsatisfactory. One proposition was to make the shilling nine or twelve grains lighter; another was to make the mint free.¹ If the shilling had been dropped ten grains, the mint charge on 62 grains, at the existing rate, would have been $3\frac{7}{8}$ grains, making the effective shilling $65\frac{7}{8}$ grains. Six such shillings would be $395\frac{1}{4}$ grains; or, the effect would be the same as making a $16\frac{1}{2}$ pennyweight dollar current for six shillings without stamp. Must we not suspect that pieces of eight of this description, or lighter, were becoming current, by the toleration of the market, for six shillings, without stamp, and that the first proposition was an attempt to offset them by a shilling which could bear the existing mint charge yet not cost more than they?

The Deputies tried, in 1679, to put the piece of eight at six shillings without stamp. The Council refused.² In the following year the agitation for a free mint was renewed.³ In a petition to this end it is said that the loss at the mint is $6\frac{1}{4}$ per cent., and that there is no gain by coinage, for "a Spanish cross is as good as a New England pine." Those who can hoard or export have "something more than the mint will yield." These statements from their experience ratify the deductions we have made as to the necessary effect of the existing laws and facts. The inference in favor of a free mint was the only sound conclusion, but it does not seem to have met with general acceptance. Hull said that the coins were exported because they were too heavy. He favored lowering the shilling twelve grains. A good piece of eight would then, he said, be worth 7 or $7\frac{1}{2}$ pence more. The calculation shows that by a "good piece" he meant one of 420 grains. He thought that this measure would keep the dollars in New England. He proposed to divide the loss on debts of more than six months standing between debtor and creditor, and to throw it on the creditor for more recent ones.

¹ 3 *Amer. Antiq. Soc.*, 299.

² Cf. 1 Weeden, 326. A Frenchman who was arrested at Boston, in 1679, had in his possession tools for clipping and clippings of Massachusetts coin (Drake, *Boston*, 437, n.). See Dankers & Sluyter, 340, 378.

³ Crosby, 109.

Andros tried to have the mint allowed and he did obtain permission to rate foreign coins.¹

Pieces of eight were rated, in 1682, at 6s. 8d. per oz., if of sterling standard,² the object being, once more, "to keep money in the country." This was the year in which the current contract with Hull and Sanderson ended. This law left the mint and the stamp out of view, and we hear no more about them. The first proposition was that dollars should go at their weight in New England coin, and this was afterwards explained to mean at 6s. 8d. per oz.³ A full piece of eight (420 grains), of sterling alloy, would be worth at this rate 5s. 10d., not six shillings; otherwise stated, if 420 grains were six shillings, silver was at 6s. 10.28d. per oz. The law of 1682 would have established a standard by weight, not by tale, 72 grains being a shilling, but no effect of the law can be discovered, partly no doubt because of the inconvenience, and partly because current pieces of eight of 420 grains or less had probably become current money of account for silver debts at six shillings, so that this law would have enhanced debts.

The officers of the English mint, in their report of 1684 on the New England coins, said that the mint charge was one-third greater than had ever been allowed in England.⁴ They found the New England coins $22\frac{1}{2}$ per cent. below sterling of the same denomination, and recommended that, if the mint was allowed to continue, it should be compelled to coin sterling coins. They added that pence, half-pence, and farthings might be made of tin and supplied to the Colonies to the profit of the royal treasury. An almost identical report was made on Sir

¹ Chalmers, *Polit. Annals*, 421, 440.

² *V. Col. Rec.*, 573; see Crosby, 85.

³ Whitmore, *Col. Laws*, 292, 2, 294.

⁴ The seigniorage in England, after 1601, was 2s. per pound of silver, except during the reign of James I, when it was 2s. 6d. (1 Ruding, 90.) Sir Robert Cotton (*Posthuma*, 285), in 1626, said that it was 4s. per pound weight of silver, in England, while abroad (Holland) it was only 2s. His statement requires explanations which we do not possess. Two shillings and six pence sterling per pound weight would be 3.225 pence New England per oz. The New England charge was at first 6 pence N.E., afterwards 5 pence, per oz. Lowndes (*Silver Coins*, 127) speaks of a mint charge, in 1695, of 1s. $4\frac{1}{2}$ d. per pound weight of silver as then existing in England.

Wm. Phipps's petition to the new government, and under the new charter, in 1692, for the grant to Massachusetts of the privilege of coining.¹

The reasons alleged by Pres. Dudley and the Council, in 1686 (although the true reasons were their own pecuniary interest), for permitting Blackwell's bank to be established, were the decay of trade and especially the exportation of silver and the scarcity of money. Hence they argued that a bank was necessary to "provide a currency."²

When Dunton left Boston, 1686, he carried out £400 in silver in his trunk without apparent fear or concealment.³ Randolph wrote, 1688, "Some would have all pieces of eight, tho of 15 pennyweights, go at six shillings New England, others at 17 [pennyweights], but they stand at 17½. Our money goes all away." This shows that there were dollars in circulation which were as light as fifteen pennyweights, and also some which were as heavy as seventeen, but that the standard was dollars of seventeen and a half. In the Proclamations given by Ruding, rating foreign coins for circulation in Ireland, during the last third of the 17th century, the piece of eight is always stated as 17 pennyweights. Queen Anne's Proclamation of 1704 fixed the dollar of 17½ pennyweights at six shillings as the standard, which caused great complaint in the Colonies, because it was said that scarcely one could be met with in the circulation which weighed over 17. It is of the first importance to observe that the piece of eight had now become, in Massachusetts as elsewhere, the standard coin, rated at six shillings, and that even if it weighed 17½ pennyweights, the shilling had fallen to 70/64.75 grains.⁴ It is one of the enigmas of the history that the Colonists treated this rate and 6s. 8d. per ounce as equivalent. The metallic par of the 70 grain shilling with sterling was 132.71. It cannot be doubted that pieces of eight of 17 pennyweights were the best actually current at six shillings, that is, the silver shilling of account was, before 1690, not better than 68/62.9 grains; par with sterling silver coins 136.6.

¹ *Cal. Treas. Pps.*, Ed. Redington, 214.

² Felt, 46.

³ *Letters from New Eng.*, 303.

⁴ Wait Winthrop, 1699, speaks of the "difference between New England money and the current coin here" [Boston] (IV. 8. *Mass. Hist. Soc. Coll.*, 569).

A fierce law against clipping, filing, and rounding was passed in 1692, proving the activity of these operations. No unclipped New England coins could circulate under the circumstances just described. Such coin was to circulate "at the rate it was stamped for," that is, if it had been coined originally as a shilling, it was to be a shilling; if as a sixpence, a sixpence. A piece of eight of 17 pennyweights was to be six shillings; that is, the law accepted and recognized the usage of the market, and puts it beyond a doubt what that usage was. This law was disallowed by the English authorities, because the penalties in it for clipping, etc., were not the same as those for the same offences in English law. Such was the interpretation put upon the provision that the laws of the Colony must conform to those of England.¹ The law, so far as concerned the rating of the piece of eight, was reenacted and approved in 1697.² The shilling under it was 68/62.9. This Act is one of the most important in the history. It set a definition, at last, by weight, for Massachusetts, of a shilling in the piece of eight; uncertainty remaining, nevertheless, as to the fineness, which was assumed to be sterling. It took up and made lawful a state of things which had existed, in all probability, by the custom of the market, since 1685. This law and this definition of a shilling were the point of departure for the following period (1690-1736), during which clipping of silver and over-issues of paper produced inflation and confusion. As we shall see below, a concurrence of facts and legislation brought this definition once more into validity, as the standard of reference, and it remained such from 1737 through the rest of the colonial period. "Good and lawful money of this Province," wrote Gov. Belcher to the Lords of Trade, in 1739, "is seventeen pennyweights for six shillings."³

The law of 1697 had other important consequences, partly political. The home authorities having allowed it to stand, the Attorney General⁴ advised them that they were estopped from making any regulations in regard to colonial currencies inconsistent with it. Therefore, when discussing the policy to

¹ A similar decision, 1 *Penn. Coll. Rec.*, 418.

² 1 *Prov. Laws*, 70, 296.

³ IV. 7. *Mass. Hist. Soc. Col.*, 225.

⁴ Chalmers, *Currencies*, 14.

be adopted in the Proclamation of 1704, they considered that they were not free to introduce the sterling standard, which otherwise they would have done.¹ This exaggerated scruple, and the ridiculously wrong-headed policy to which it led, especially when compared with the reason for disallowing the law of 1692, illustrate well the faults of the colonial administration. It could not have cost more effort to persuade Massachusetts to revise her law of 1697 than to accept the prescriptions of the Proclamation, which she never did! In fact the English authorities did violate the law of 1697, for they raised the standard to six shillings for seventeen *and a half* pennyweights. For reasons which will appear below, the sterling standard, with due provision for outstanding contracts, would have been clear and simple, and would have had far better chances of success than the measure which was adopted.

The law against the exportation of silver was renewed, in 1697, for three years,² and energetic efforts were made to enforce it, but it did not put a stop to complaints of the scarcity of money.³ In 1699 the pieces of eight in Rhode Island were clipped down to 13 or 14 pennyweights.⁴ There was a proposition, in 1700-1, to rate gold at 3 pence per grain and silver at 7s. per oz. It failed. It would have introduced a gold currency (17.3 to 1), unless, as probably would have happened, the piece of eight, current at 6s., had run down to 15 pennyweights, *i. e.*, silver at 8s. per oz. (15.137 to 1). In 1703, the penalty for clipping or counterfeiting the Queen's coin was made death; for the same abuse of any coin current in the Colony, the pillory, ear-cropping, and flogging. The state of the coinage was so bad that, in 1704, a committee was appointed to report "what expedients they think will best remedy and reform the ill state of the coin." Inasmuch as they never reported, it appears that they could find none.

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¹ *Penn and Logan Corresp.*, 248.

² *1 Prov. Laws*, 306.

³ *V. 8. Mass. Hist. Soc. Coll.*, 569.

See's Reprint Laws 1636-1705, p. 45.

INDUSTRIAL DEMOCRACY.¹

THE most critical reader, who is at the same time fair, will not deny to these volumes, by Mr. and Mrs. Webb, the honest tribute which distinguished achievement merits. The unconcealed conviction that society will be exploited as long as the "three rents" are left in private hands, may excite no end of incredulity. The fertile and ingenious use of analogy in much of the reasoning may give rise to many suspicions; the practically exclusive appeal to English experience may be thought far too narrow to warrant the prophecies in the stirring and illuminating chapter on Trade Unionism and Democracy. In spite of the admirable qualifications of the difficulties inherent in applying the doctrine of the living wage, even the most sympathetic reader will be dazed at the thought of applying it on a scale that comports with the author's ideal of labor relationships in a world-market. The whole work is nevertheless so strong in original research, so rich in suggestion, so complete in the general unity of its conception, that it could bear lightly far graver defects. There are few aspects even of economic theory which will not gain from the ordered and ample results that are here gathered. As for the entire significance of labor associations, with the momentous practical questions raised by them, no one has thus far wrought a service that is at all comparable in accuracy and in solidity.

The scope and spirit of the work make it alike necessary to the employer, the trade unionist and the student. Both for instruction and reproof, it brings to each what he needs most to know. The average successful American employer is likely enough to admit that trade unions are "all right if they would only keep to their proper business." This means usually that they may do anything except interfere with his own absolute control of the business. The Union may organize mutual benefit associations, they may hire a hall and improve their

¹ *Industrial Democracy*. By Sidney and Beatrice Webb. London, New York and Bombay: Longmans, Green & Co. 1897—2 vols. 8vo, pp. xxli, 929.

minds. All this is worthy of approval, but that the Union should at any point disturb his own exclusive direction of the business-wages and conditions, appears to most employers an intolerable impertinence. If the proof of this attitude were not so overwhelming, one would have said that the employers must long since have learned that the terrible stress of competition, against which they contend, is no whit less severe upon the employed. The employer has at last learned his lesson about competition. He knows better than those who write books that it must be brought under some form of control, but how slow he has been to apply this conclusion to the labor market. He sees clearly that his own successful combination may be, to the last degree, unpleasant to other employers, and yet he expects labor to combine in ways that shall not be in the least unpleasant to him. The competition of other employers drives him to his wit's end, why should it be thought possible for labor combinations to become really effective in their own defence without putting upon the employer the same stress and annoyance which the industrial struggle has everywhere come to imply.

It is the high merit of the authors that they put their evidence in such shape that no open-minded employer can escape the conclusion, that Trade Unions are justified upon precisely the same grounds that tariffs, trusts, and English "alliances" are justified, or if "abuses" are to be considered, who will maintain that those of labor associations are more to be deprecated than the ugly record of so many capitalistic combinations in the United States?

All this is very elemental and long familiar to every student. What Mr. and Mrs. Webb have done, that is by no means so familiar, is to analyze and unify the evidence of Trade Union history and purpose so that those of every class (employer, trade unionist and student) may judge fairly and intelligently the whole movement with which the book deals. The trade union would have been crippled in its infancy had it taken the employers' advice to cultivate merely the mutual benefit features. To ignore its primary function as a fighting institution is to misconceive the very reason for its existence.

As long as the comforting fiction held good that the interests of employer and employed were one, one not only in a large and general way, but inevitably one in definite, practical and immediate details, it was of course possible to press these Bastiat consequences upon the unions. The sore experience of the earlier unions taught the laborer the truth about the economic harmonies long before the economist or business man learned it. The points at which these interests diverge and come into conflict were long *felt* by labor before the learned made the proper theoretic modifications. The Trade Union veteran, George Howell, speaking straight from his experience before he had read a word of Long or Thornton, let no occasion pass on which he could discredit the wage-fund theory. Mr. Mill, noticing some of these speeches by Howell, wrote him that he was unconvinced, but should like to talk with him. It is this kind of experience born of long buffeting that gets an authority of its own. Men like Howell learned earlier than the economists that the identity of interests theory was quite inadequate to express the actual relations between an employer and his men.

Every economic copy-book now insists upon the limits to the "common-interest" theory, though the consequences of these limitations have been less boldly drawn. The points of real conflict in interest, between employer and employed, are perpetually shifting, but wherever they exist there is legitimate ground for organized resistance. The chief embarrassment in framing any theory of relations between employer and employed, or of special remedies like arbitration, is that the area of divergence in interest is forever changing. It not only differs from place to place, it differs even more, when we compare different standards of living and intelligence among the employed. During the agitation for eight hours for factory women in Illinois years ago, a large employer was heard to say, "My hands will take what I give them, and work as long as I can make them. Neither the State nor any body of cranks shall interfere with my rights." Here the relationship was conceived as one of absolute and uncompromising mastership, in which the best contract the employer could make with his

hands is final and unalterable. If, then, we were to measure from a conception like this, we should find that the conflict of interests steadily enlarged with every rise of intelligence and capacity in the wage-earner. It is only because the employer and the state continually modify the contract relation that we cannot say, without qualification, the conflict of interests is necessarily extending.

There is, however, little ground for dispute that if labor has the right to organize, it has the right to make the organization effective. To do this, it must be alert to contest every advantage it has won. If intelligent, the organization will know when to yield, as scores of English productive coöperative bodies have learned to take losses as well as gains. But what would have happened if the unions had acted upon the advice of the employer; if they had assumed practically that there was no divergence of interest between them; that the employer's private advantage was one and the same with the advantage of the employed! The evidence in these volumes will convince most readers that the loss would be as great to general business as it would be to the wage-earners themselves. The real ends of combination would have been defeated quite as effectually, if the laborers had listened to the well-meant counsel about the needs of thrift and self-improvement. These are well, but they are not grounds on which trade unions would have made their fight.

The criticism which would make the gathering of burial and other funds a central object is the direct undoing of the union. With innumerable friendly societies, insurance in its various forms is the controlling motive. The Trade Union came into existence and still persists for the purpose of protecting its members from certain specific dangers. Its procedure may be clumsy or blinded by passion. It may interpret ill the danger which is thought to threaten its corporate life. The union may blunder in its tactics against a hostile competition, as has been true of countless trusts and corporations. The Trade Union is *there* however, to defend itself according to its own intelligence and force against those aspects of competition which are likely to endanger its standard of living. In this, it

differs in no way from the well-to-do sections of the community. The difficulties under which the unions labored in their earlier history made inevitable many of their most serious mistakes:—like that of opposing outright the new machinery.

The instinct was nevertheless right and sound that those working adjacent to each other in a common craft must defend the conditions under which their wages were paid. It is this strife over the "standard rate";—the strife to maintain it and make it keep pace with the general rise of social conditions, which throws light at every point, even upon those trade union positions which have been well nigh universally condemned. We see why apprentices have been restricted in one trade and in another not; why piece-work is opposed by one union and insisted upon by another; why one union is hot for eight hours and another lukewarm or even hostile; most of the easy generalizations from unfriendly critics fare ill in this ample record of experience. Let us select from among the most frequent of these generalizations two which concern apprentices and opposition to machinery. As regards apprentices, however unfair or unwise restriction may be, it is expecting much of a struggling union, when it has a general average of its *own members out of employment*, to ask that it shall welcome the uncontrolled entrance of young competitors. It is commonly said that the unions are very stupid about this, inasmuch as they assume the existence of a certain quantum of work which will be lessened if new workers are admitted.¹ If large or long-run interests only are taken into account, the unions

¹ It would be a very pretty bit of economic speculation to compare the "genius for recovery" from false theories among trade unionists with that of the economists or leading politicians. One need not go back to instances like that of the Mercantile Theory, but take an illustration from the reigning policy of dominant nations, like England. The whole theory that "trade follows the flag"; that markets must be opened and kept open by active military force, assumes as grossly as the most undisciplined trade union that there is a fixed quantum of trade which must be fought for and maintained at the sword's point. The trade union says, "If we don't get this work, some other fellow will." The English, in the teeth of their free trade policy, say "If we don't get this market in East Africa, the Germans will, and if the Germans get it we shall be so much the poorer." Instead of Spencer's main contention about the effects of Industrialism, we now have the sinister fact that international trade is coming to be the chief breeder of wars and of the ponderous preparation for wars.

are clearly perverse in their contention. But it happens that large and long-run interests are very rarely considered in that part of the world's business which is under sharp competition. No one more than able business men are moved by what are relatively short-run motives;—available profits for six months or a year. The reason given is practically convincing. They cannot control conditions far beyond them. The more immediate interests *can* be controlled and by this fact their activities are largely determined.

This is also the procedure of the unions regarding the restriction of apprentices. It is part of the effort to lessen competition at those points where it is felt that something may be accomplished. The failures in this (as with efforts among employers) are far more frequent than the successes. But the effort, under the impulse of immediate exigencies, is in no sense peculiar to the unions. The writer once heard from a large employer, "Yes, the union is doing at bottom what my own corporation is doing, but two wrongs don't make a right." It seemed fair to ask him upon what grounds or upon what view of human nature he was justified in demanding more of the unions than of those who conducted his own organization. No intelligent defender of the unions would seek to shield them further than to insist that the fight to maintain their standard is a struggle to check competition that is in its nature precisely the same as that in which the employer is engaged. Really to understand this, makes it possible to be fair toward labor organizations. Their manners in the struggle are likely to be offensive. Their methods are sometimes brutal, and but seldom do they command the power to state their case with the skill and suavity which becomes second nature to a corporation lawyer.

No phase of the long conflict brings out so vividly the real motive at the heart of the labor question as that of the use and control of machinery. The opposition of the unions to the introduction of machinery is a sorry record. It began in sheer savagery and violence, passing slowly into sullen acceptance of the inevitable. It is the story of men fighting desperately and mistakenly for what they thought to be a threatened liveli-

hood. They have to a large degree left these errors behind, although the fight over the question of "applied invention" is by no means at an end. There are few trade unions that have not learned enough to admit that the introduction of machinery cannot be stopped and ought not to be stopped. There are fewer unions still that do not (if they have the power) contest the *manner of its introduction*.

"Let it come, but in such way that we can get some share in the new invention," is the almost invariable attitude of unions at the present time. One answer is made to them, "You get your advantage in cheaper commodities." This is beyond dispute, but, as before, it deals with a far-off, general result, which acts on the imagination of the Trade Union as little as the distant result affects the tariff man, the business firm or corporation. No one who watches at close range the introduction of machinery (as in the boot and shoe industry or the printing trade) will doubt that the very existence of unions is imperilled unless some organized effort is made on the part of the men to influence the manner of its introduction. The history of our own Typographical Union furnishes sufficient proof of this. Where the unions are strong they can do much to determine the conditions under which the new machine is introduced. "We can at least soften the blow," as a printer has expressed it. It often happens that a young, vigorous and intelligent laborer is selected by the employer to test the new invention; to see what its capacity is. After this is known, the effort is made by the employer to adjust the speed and the wage so that the gain may be at once and entirely his own. That the consumers, most of whom are workmen, would gain in the larger and cheaper product, is almost certain. What excuse then for the unions is their attempt to control even the manner of its introduction? Their opposition results in delays, innumerable practical difficulties and doubtless in a lessened and costlier product. The débacle of trade unionism at the Carnegie Works in Pittsburg leaves the management free to apply instantly each new invention. There is no higgling with labor committees, no slowing up, or foolish attempt to make the machine work less than its capacity allows. The new science is applied swiftly

and effectively with the sure result upon the market of an ever huger and cheaper product.

This ideal of *laissez faire* seems justified so far as the successful employer of character and great ability is concerned. Given an industry that has acquired the "momentum of prosperity"; an industry directed with such mastery as now characterizes the Carnegie Works, and it may be maintained that both the more vigorous and intelligent worker as well as the consumer will be the gainer, if the friction of trade unionism is excluded. So far indeed as we imagine any ideal of industrial superiority or any ideal of fair competition, the organized resistance of labor may be regretted. To the extent, however, that the actual scramble in the market is taken into account, the sharp and conscienceless employer and, what is perhaps economically worse, the weak employer, so far labor organizations are justified on the same grounds as other industrial organizations. It is only necessary to understand it and to see it as an organized activity along lines and with aims that are so exactly the same as those that distinguish a large part of all competitive business, that the trade union restriction of competition appears as one *kind* of restriction and certainly not the worst kind. It is only when this necessity of defending their standard rate is seen, that one can be quite fair to the long record of mistakes in trying to limit apprentices and oppose machinery. The authors furnish plenty of evidence that these mistakes grow fewer about in proportion to the age and experience of the unions.

No question of keener interest can be raised than that which is implied by the entire change of attitude toward machinery at the point where the wage-earners see that they get the direct and immediate good of it.

No facts in the development of industry have such significance for the ideal toward which our authors look as the facts concerning this fight over the machine. The change often forces a complete revision of the wage scale. Not always, yet not seldom, it adds to the nervous strain of the worker by the increased intensity of the pace set. None would deny that ~~where~~ here this last is the case, extra compensation is due. If we

except employers of great intelligence and fairness, if we take the general average of business in which competition is sharp, it continually happens that the new process involves the dropping out of one or more men in the labor group, leaving the compensation of the others upon the old wage-level. If unresisted, this would constantly occur in intensely competitive industries with the ordinary hard-pressed employer. Can it be expected that no struggle should show itself over an issue of this nature? Are men likely to be satisfied with the reply, that the result will by and by increase their real wages and eventually set more laborers to work? If their organization were not then and there imperilled, the men might perhaps accept the explanation, but the very organ through which they make their fight for the standard rate is threatened. The opposition therefore becomes so fierce as to justify to some extent the popular impression that the trade unions are opposed outright to the new machine. Fortunately in such industrial democracy as has thus far been won, we have testimony upon this point. It is a witness that touches the heart of Mr. and Mrs. Webb's main contention, that the race must learn to manage its own business; that democracy must apply to life as a whole, not merely to religion and politics, but to wealth-making and distributing. The ideal is less wild than at first appears, as the town meeting method is by no means to prevail. There is in this ideal no hope for the Referendum. This was the ideal of the unions in their green estate between 1834-70. Since then the power of the general secretary grows apace, until finally "the use of the Initiative and the Referendum has been tacitly given up in all complicated issues and gradually limited to a few special questions or particular questions."

"If, therefore, democracy means that everything which concerns all should be decided by all," and that each citizen should enjoy an equal and identical share in the Government Trade Union, history indicates clearly and inevitably the result. Government by such contrivances as Rotation of Office, the Mass Meeting, the Referendum and Initiative or the Delegate restricted by the imperative mandate leads straight either to inefficiency and disintegration or to the uncontrolled domi-

nance of a personal dictator or an expert bureaucracy, (36 p., vol I.) Finally the authors look to a "differentiation between the functions of the three indispensable classes of citizen electors, chosen representatives and expert civil servants."

Whether this ideal of democracy, taken, one would guess, a little too narrowly from English experience, is to prevail or not, will not here be contested. It is more desirable to see what influences are at work to train the demos for whatever form of increased democratic control is inevitably before us.

The most concrete illustrations of this struggle is that which concerns mechanical invention as it is applied to industry. Fairly disciplined labor does not any longer merely fight the machine. There is fortunately very definite proof upon this point; that the opposition is not primarily against the machine is shown in the experience of the vast coöperative businesses in England and in the Socialist bakeries of Belgium. It cannot yet be said that the traditional fears of labor displacement are altogether overcome, as several instances in recent English experience show. If pains are taken however, to study the situation so far as to make the adjustment cautiously and with fair regard to the interests of the whole body of workers, it may be said that none are more ready for the latest and best machinery. M. Anseele, the able manager of the Gent *coöperative* says, that the bakers have already learned their lesson. "They are quick to vote out a bread kneader (*pétrin*) that is a little out of date." The writer saw a few weeks since in a Brussell's bakery, very recent machinery at work and was told by workmen that they could not afford anything but the best and most expensive machines, "otherwise we could not succeed as we do, with the three shifts of eight hours and get our minimum wage of five francs."¹

¹ The writer has visited, during the last four months, nine of the largest coöperation businesses in England and Belgium. Everywhere one finds the newest and most costly machinery. There are still traces of opposition to its purchase and use, but more and more a hearty recognition that the swiftest and most effective invention upon the market is a necessity. There is, however, a general insistence that it shall be introduced so that the working group shall get the least immediate hurt. "We have," as a Kittering Boat Manager said, "to study the situation with a good deal of care, so that the advantages may be kept among

Here experience had rapidly taught them that a certain amount of product must be turned out as a condition of an assured wage, at least a franc more than was paid in average private bakeries. They had learned that eight hours were impracticable unless the output was great enough and good enough to warrant it. Compare this splendid result of industrial democracy with the long fight of the New England shoemakers against the lasting machines. It was everywhere said "the union is opposed to machinery." In Brockton, Mass., one lasting company not only furnished machines, but trained and sent the man to work the machines. This meant the destruction of the union as well as rapid turning off of a large proportion of the men.

Several employers were frank to admit that the men were justified in their resistance. This illustration is, though extreme, a perfectly fair one in showing the effort of the average hard pressed employer to get his new mechanism to work in such a way as to secure every immediate advantage to himself, although the immediate advantage of many of his workmen may suffer.

That there is the source of endless friction here is plain. Except in the too frequent tyranny of the striker toward non-union labor, nowhere does one see the labor organization in a more sinister light than in this attitude toward machinery. English unions are still justly charged with constant attempts to lessen deliberately the full capacity of the machine. The evil is as real for labor in the long run as it is for the employer and the purchasing public. It is therefore the more important to account for an effort so persistent as this apparent opposition of organized labor to the new applications of science to industry. On its material side this opposition contains the gist of the social question.

The most powerful argument for a genuine industrial democracy centers about this fact. Capitalism has come to be mechanism; mechanism controlled for personal profit. It

our workers, and this, we are upon the whole able to do." The only instance of opposition was that in which the introduction appeared to necessitate the dropping out of three men. Everywhere the testimony was the same. "We can teach practically all our workers that their interests are advanced by the use of newest inventions, so that they are as ready for it as the managers."

becomes ever costlier and more complex. There is a very real sense in which it is increasingly "social,"—a sense therefore in which private control and ownership may appear more and more to conflict in *la grande industrie* with the common welfare. Nor is it possible to argue this out merely upon economic grounds. If the spread of education and a wider diffusion of democratic sentiment make masses of workmen *feel* a conflict between their interests and the private, profit-making control of machinery, this sentiment then becomes as hard a fact as any other which the situation offers. For illustration, we no longer need to turn to any theoretic view of social equality. The steady pressure to socialize the machine appears on national and municipal areas the world over. It is peculiar to no form of government. It is as strong in democratic Switzerland and New Zealand as it is in a bureaucratic camp like Germany. With more accuracy still, we may measure this pressure in the most signal instance of industrial democracy in the illustration just given:—productive coöperation as now seen in England and Belgium.¹ It will be remembered that one of the authors of the present volumes, Mrs. Webb, then Beatrice Potter, wrote a few years since an admirable book upon coöperation in which the trade union, municipal and coöperative movements were shown to be parts of a common social activity; all three making for the same goal of a democratized industrial and political life. Greater completeness would be reached if the national impulse were added, yet it is within the English and Belgian coöperation that the clearest and most direct light is thrown upon the special question here at issue. These coöperators are now producing on a scale large enough and various enough to show how the question of machinery is to be considered after it has been taken from the private employer and put to group uses with employers' profits wholly eliminated.

Now, whatever may be thought of the comparative merits of coöperation and competitive industry, it is likely to be conceded

¹ France is oftenest spoken of as first in productive coöperative enterprises. It has not there been, however, a workingmen's movement, but a patronal movement in which employers of extraordinary capacity have initiated and controlled the business from above.

that here is an advantage for coöperation of capital importance. Even if one claimed that the private control of machinery is more efficient so long as it can be worked without too great friction from the side of the workmen, it is apparent that a great advance has been made where the workmen are so related to the machine that they can *see* their own interests furthered. The more democratic method places labor at a point where it quickly learns its lesson. This surely is an economic fact. In industries where trade unions are to continue and where new appliances involve an alteration in the wage scale, it may prove, from the social point of view, of growing importance to remove the friction by democratizing the process. The commonest complaint to-day among English employers is that the workmen will not allow the machine to do its full work; that therefore the English are handicapped in competing with America and Germany, where unions are relatively weak.

It was formerly felt that this difficulty was only temporary, and would pass away with the increase of education and experience among the workmen. Education and experience have demonstrably wrought one change. The unions have come to see that machinery is the most powerful factor in the increase of wealth and, in the long run, of their own wealth. On the other hand, education and experience have probably increased their determination to resist all claims on the part of the employer to put in machinery solely as his own interest dictates. If one can trust the signs of the socialistic spirit in the nation, in the city, in coöperation and in trade unions, this determination on the part of labor to secure its immediate part of the advantage of new mechanism is everywhere increasing and is likely to increase. In industries and conditions where it is found impossible to secure this advantage, the effort for some compensating good, like lessened working time, is certain to be made. It has been admitted that any defense of trade unions upon this point would be exceedingly difficult if strictly industrial issues alone were taken into account. On the "areas of realized industrial democracy," coöperation, there is incontestable proof that a motive not strictly economic enters powerfully into the activities of that great movement.

In scores of factories and hundreds of stores, one reads "Each for All and All for Each" or some corresponding sentiment. In spite of every charge against the "dividend huxtering" of distributive coöperation, these claims of brotherhood in business are by no means all humbug. They represent a very real and telling force in the whole coöperative activity of England and Belgium. In nothing does this better instinct more appear than in the attempt of the union to safeguard its weaker members; to act, not from the personal but from the group point of view. It is upon the whole the older and weaker that are first struck by changes introduced by inventions. The question was put in a large number of coöperative shops: "What is the effect upon the older workers of the newest machinery?" Invariably the answer was, "It is all the time more difficult to employ any except young and vigorous men and women." A product both larger and cheaper would necessarily result from such a policy relentlessly carried out. Large private employers often sacrifice much to find work for those that are thrown off the machine. But in these coöperative establishments, it is distinctly the policy to adopt the enlightened trade union view; carefully to study the situation with the object of distributing the advantage which the new invention will bring among the workers in the whole shop. This is accurately the position of trade unions wholly apart from coöperation. It is understood that instant business interests may perhaps suffer. It is seen that the most alert and vigorous may have to sacrifice some possible gains. If the maximum of wealth-creation is taken as the final object, this slowing up is a weakness.

No one can, however, follow the democratic sentiment in industry without observing that a principle which must be defined in terms of welfare rather than of material wealth is getting wider and wider acceptance. Sir William Windier has said of Australia:

"The critics are right, we have blundered badly with our state-managed railways, but meantime it is forgotten that we have come to act on a principle that is not simply business. We are going to learn to use the great engines of traffic for the public, and not allow it to be controlled for any other end. In

spite of all our defeats, the people will not go back to private management, and I have come to believe that the instinct is a right one."

It is obvious that this principle will be attended with grave and constant dangers. It will suffer in its evolution many humiliations. It will inexorably demand, in its application, first-rate business ability of the type that one sees growing in England among private employers of highest rank.

Mr. Livesey of the South Metropolitan Gas Works has convinced his directors that the workmen must have their representatives upon the board of management. Some of the largest London printers, and papers of the magnitude of the *Daily Telegraph*, work cordially with the unions in applying new machines so that the advantages may go at once to the labor union as well as to the employer. Mr. Drummond, the former secretary of the union, says that this is not only true in letter, but in spirit. "They are coming to see that it is the only wise policy from every point of view." He adds, "This new attitude on the part of the employer is not humbug, but a genuine and intelligent recognition of a more democratic sentiment in business."

Are these democratizing tendencies to go on until the dream of our authors is realized? Is the remedy "to extend the conception of the common rule from the trade to the whole community, and by prescribing a national minimum, absolutely to prevent any industry being carried on under conditions detrimental to the public welfare?" This is not a question of sanitation even in its widest sense, but of wages, "the policy of the national minimum will have to be applied to wages." Nothing in this splendid contribution stirs more frequent misgivings than its confidence in the "legal enactment." Criticism would have here its most inviting chances against this work. A passion for logical completeness makes the appeal to the state necessary because the voluntary methods are so palpably weak to deal with a certain degree of labor inefficiency and with "parasitic trades."

However sturdy one's faith may be in "legal enactment," it is almost too obvious that the limits to such compulsion are

sharp and severe. The appeal to sanitary legislation as justifying by analogy the extension of the enactment into the market must excite doubts, if for no other reason than the lack of evidence. We know the brave record of eight-hour achievement along voluntary lines. We are assured that if the result is good when won freely, it will be as good when forced on by law. Yet, it could not have been won voluntarily unless certain habits of thinking and acting had already grown strong enough to make the victory possible. What effect will legal enforcement have upon laborers that may be destitute of such habits?

Already there are troublesome indications in England that the energetic eight-hour laborer will often take jobs when his work is done. Is this, as has actually been proposed, to be stopped by law? The kind of human nature we happen just now to deal with is not likely to abide such legislation. These are but hints of the difficulties certain to rise if law is carried to extremes.

The noble end of a consistently democratized life, religious, political and economic, we must learn, with our authors, to accept because it is as inevitable as it is desirable. They have shown with convincing skill how powerfully the trade union history bears upon the slow fulfilment of this ideal. In spite of the eloquent plea for liberty and development of individual faculty (Vol. ii, 847), the open-minded reader cannot free himself from the suspicion that the goal of a more tolerable social life will be reached the sooner, if less emphasis were laid upon the compulsory and mechanical elements in the remedial process.

This suspicion will, however, not detract from the quick sense of indebtedness which the volumes inspire.

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DOMINION POLITICS IN 1898.

THE attitude of the Conservative majority in the Senate towards the measures of the Liberal Government; the sweeping changes made in the franchise laws; the establishment of an exclusively British preferential tariff; the adoption of the Plebiscite in connection with the prohibition question; and the reform of the postal laws, serve to make the 1898 session of the Dominion Parliament interesting to students of Canadian politics. It was more interesting than any session for ten or fifteen years past; for in 1898, the Liberal Government sought to embody in legislation several of the pledges of the Ottawa programme of 1893, on which the Liberals were returned to power at the General Election in 1896. To follow the proceedings of the recent session at Ottawa, it is necessary to remember that, while the election of 1896 and the subsequent by-elections have given the Liberals a majority of nearly forty in the House of Commons, they are in a minority in the Senate. Not more than twenty-five of the eighty-one members of the Senate are supporters of the Laurier Government. All the other Senators were appointed by Conservative Governments; most of them between 1878 and 1896, during which period the Conservatives were continuously in possession of the Administration.

I.—THE SENATE AND THE YUKON RAILWAY BILL.

In 1898, as in 1897, the Senate asserted itself chiefly in connection with railway legislation. In 1897, it refused its sanction to a scheme for extending the Intercolonial Railway from Levis to Montreal, because of the terms made by the Government with the Grand Trunk and Drummond County Railway Companies, whose lines were to form part of the extension of the Government railway. In 1898, it refused its sanction to the Stickine and Teslin Railway bill, and thereby prevented the Government from carrying into effect its scheme for opening out the British Yukon country.

The plan of the Government with respect to the Yukon Railway was made public only a few days before the assembling of Parliament on the 3d of February. It was given out by the Government through its principal newspaper organ in Toronto, and was put forward, not in a sober and matter of fact way, but rather as an enterprise might be advertised by a group of company promoters. The scheme was to establish a railway, river and lake communication between the coast of British Columbia and Dawson City. The railway was to begin at Glenora or Telegraph Creek, on the Stickine River, and was to run a distance of about 150 miles to the head of Teslin Lake, from which point Dawson City was to be reached by means of the Hootalinqua, the Lewes, and the Yukon rivers. The line was to be of narrow gauge. The concessions for its construction were to be in favour of Messrs. Mackenzie and Mann, contractors well known in connection with street-car and railway undertakings in Canada.

From the first the Laurier Government has adopted the policy that the gold mining country of the Yukon must pay for its own government and its own development; that it must throw no charges on the rest of the Dominion of Canada. This policy is at the bottom of the system under which Yukon mining licenses are sold, and under which miners are compelled to pay royalties of ten per cent. into the Dominion Treasury. It was also to be embodied in the Yukon railway legislation.

Instead of the Government, as heretofore, granting a cash bonus of so much a mile for the construction of the railway, it was to pay the contractors exclusively in land grants. They were to receive 25,000 acres of land in the Yukon mining country for every mile of railway built; and it was estimated that for the length between the Stickine River and Teslin Lake they would receive 3,750,000 acres, or an area of 5,850 square miles. On these lands no taxation was to be paid, except such as might be levied by municipalities, and the mining royalties were to be at the rate of one per cent., as compared

1 ten per cent., the royalty on gold taken out of Government

1 ten years, the owners of the Stickine and Teslin Rail-

way were to be empowered to charge special rates for passengers and freight. Moreover, they were to have for five years from September, 1898, a monopoly of railway communication with Dawson City from the Pacific coast, and in the event of a railway being constructed from a port in British Columbia to the Stickine River, Messrs. Mann and Mackenzie were to be entitled to receive, in preference to any other person or company, during ten years from September, 1898, such aid or assistance in land or money as the Government might be authorized and might see fit to grant in aid of the line. These were the terms the Government made with the contractors, who in turn undertook to have the Stickine and Teslin Line ready and equipped for operation in September, 1898.

Within two or three days after the meeting of Parliament, the Government submitted their scheme in detail to the House of Commons. They urged in its behalf that the proposed line afforded a practically all-Canadian route to the Yukon, and that the railway was necessary on commercial, humane, and political grounds. It was necessary on commercial grounds in order to secure the outfitting trade to the Canadian cities of Victoria and Vancouver; it was necessary on humane grounds, because of the tens of thousands of people who had gone or were going into the Yukon country, thousands of whom might be destitute at the end of the mining season of 1898; and it was also necessary for political purposes, to ensure the preservation of order in the mining country, and to prevent any attempts at setting aside the authority of the Canadian Government. From what quarters these attempts were to come was not specified, but much emphasis was laid by speakers in behalf of the Government on the likelihood that they might occur.

Even before the opposition began its Parliamentary criticisms, Mr. Blair, the Minister of Railways, who laid the scheme before the House of Commons, sought to explain away the large land grant. "I presume we may be asked," he said, "why did we give so many acres as 25,000? Why did you not give the contractors less? Well, I may frankly acknowledge that the reason was because they would not take less. We could not force them to take less. We bartered and negotiated it with

them. Members of the Government, sub-committees of the Government—sub-committees constituting pretty nearly the whole numerical strength of the Government—urged on Messrs. Mackenzie and Mann every conceivable argument in order to get them to reduce their terms, and we did get them down very much below, I can assure you, the demands they made, but we could not get them below 25,000 acres per mile; therefore did not.”

Later on in the long-drawn-out discussion, after the Opposition had shown the weakness of the plea put forward by the Minister of Railways in view of the fact that Messrs. Mackenzie and Mann were the only persons asked to undertake the construction of the railway, the land grant was defended by Sir Richard Cartwright, the Minister of Trade and Commerce, on the ground that it was a gamble both for the Government and the contractors, but especially for the contractors. Other objections were taken to the scheme; but in both the House and the Senate, criticism was directed chiefly against the land grant, which, it was insisted, was extravagant in view of the known mineral wealth of the Yukon territory.

In both Houses, the Government met the criticism of the Opposition in much the same way, by enlarging on the cost of constructing the railway, and by belittling the value of Yukon mining lands. At second reading stage in the House of Commons, the Opposition proposed an amendment characterising the conditions of the contract as indefensible, and setting forth that the House would cordially support “the grant of substantial assistance in aid of the immediate construction of a railway on the best available route, under such conditions and safeguards as would prevent the creation of any railway or mining monopoly.” The division in the House was on party lines, and the amendment was rejected by 119 votes to 65.

After the defeat on second reading stage, the Conservatives in the House of Commons practically let the bill go without further opposition, and it was read a third time without a division, and sent to the Senate. In the Senate the grounds of opposition were the same as in the House of Commons. The defence of the scheme on the part of the Government was also

the same; but as the Conservatives are in an overwhelming majority in the Upper House, the bill was thrown out, and another was added to the growing list of measures which have come to grief in the Senate since the Laurier Government came into power in 1896.

II.—THE REFORM OF THE FRANCHISE LAWS.

The Constitution of the United States expressly sets out what shall be the franchise on which members of the House of Representatives shall be elected. The British North America Act of 1867, the Constitution of the Dominion of Canada, contains no similar provision. It leaves with the Dominion Parliament the settlement of the franchise on which members of the House of Commons shall be chosen. The clause dealing with the franchise, number 41 in the Act of Confederation, reads as follows:

"Until the Parliament of Canada otherwise provides, all laws in force in the several provinces at the union relative to the following matters, or any of them, namely, the qualifications and disqualifications of persons to be elected to or to sit or vote as members of the House of Assembly or Legislative Assembly in the several provinces, the voters at elections of such members, the oaths to be taken by voters, the returning officers, their powers and duties, the proceedings at elections, the periods during which elections may be continued, the trial of controverted elections and proceedings incident thereto, the vacating of seats of members and the execution of new writs, in case of seats vacated otherwise than by dissolution, shall respectively apply to elections of members to serve in the House of Commons for the same several provinces."

From 1867 to 1885 the Dominion Parliament passed no law dealing with the suffrage, and members of the House of Commons were consequently chosen on the franchises of the provinces from which they were elected. These provincial franchises held good at five Dominion general elections—1867, 1872, 1874, 1878 and 1882. The system, however, was never satisfactory to the Conservatives, who for years prior to the change of 1885 urged the adoption of a franchise for Dominion

elections which should be uniform in all the provinces. They made six or seven attempts to get rid of the Provincial franchises, and at last in 1885 they carried a bill to that end. It was strenuously opposed by the Liberals, who spent six weeks in resisting the change, and upholding the franchise which had served during the first nineteen years of Confederation.

The Act of 1885 established a franchise uniform in all the seven provinces, and with it went a measure providing for the preparation, revision, and printing of the electoral lists each year at the expense of the Dominion Government. The Act conferred the right to vote in respect of eight qualifications. They were (1) owners and occupiers; (2) persons in receipt of incomes or yearly earnings of at least \$300 from some profession, office, trade, or investment in Canada; (3) life annuitants of \$100 a year; (4) farmers' sons living at home; (5) sons of owners of real property; (6) tenants of real property paying more than two dollars a month rental; (7) fishermen owning real property and boats, nets, fishing gear and tackle, or shares in a registered ship, to the actual value of at least \$150; and (8) Indians in possession and occupation of distinct tracts of land in an Indian reserve the improvements on which were valued at \$150.

When the Act of 1885 was passed, it was intended that the electoral lists should be revised every year. The lists were to be prepared by clerks to the revising barristers, assisted by constables appointed for the work, and then gone over in open court by the revising barrister, as is the practice in England since 1832. The first revision under the Act of 1885 took place in 1886, when entirely new lists had to be prepared all over the Dominion. The revision cost the Government \$416,000, and was so costly that there was not another revision until 1889. This time it cost \$238,400, and it had to serve until 1891, when at an expense of \$226,700 the third revision was made. From 1891 until 1895 there was no revision. Early in 1895 the lists were again revised; this time at a cost of \$243,500. When the general election of 1896 took place the lists were eighteen months old, and since then there has been no other revision. The by-elections between 1896 and 1898 all took place on lists which, as the months went by, were increasingly out of date.

It was a Conservative Government which established the uniform Dominion franchise in 1885, and Conservative Governments were in power from that time until 1896. Yet enamoured as the Conservatives were of a uniform franchise, they did not dare ask Parliament to vote each year the money necessary for the revision of the lists. Instead of doing so, it became the practice of the Government to carry through Parliament a short Act suspending the operation of the Act of 1885, and to revise the lists only when a general election was approaching. The Liberals opposed the change in 1885, and from then until 1896 they never ceased their opposition to the Franchise Act, and the registration system which it established.

Throughout this period, they complained that the registration system worked most disadvantageously for the political party in Opposition at Ottawa. While they made but few specific charges against the revising barristers, many of whom were county court judges, they complained that the preliminary work in the compilation of the electoral lists was in the hands of men who were partisans of the Government at Ottawa. These officers, it was insisted, put on the lists the names of Conservatives who were not duly qualified, and kept off the names of Liberals who were; and that to prevent many elections being determined not at the polls, but when the lists were compiled, Liberal members and Liberal candidates were compelled to spend large sums of money in watching their interests at the revision courts. Conservative members and Conservative candidates, it was insisted, were not put to these large expenses; because so long as the Conservatives were in power at Ottawa, the interests of Conservative members and candidates were safe in the hands of the officials who compiled the lists for submission to the revising barristers.

The Liberals further complained, and with good reason, that the revisions took place at such long intervals that the lists were much out of date, and that elections, by-elections especially, often took place on lists which did not afford an actual representation of the constituency. The names of men who had died, or had removed, were continued on the lists; while newcomers and young men who had come of age had to wait years before they were entitled to exercise the franchise.

While the Conservative leaders to the last contended for a uniform franchise, and a franchise under the control of the Dominion Parliament, they could not ignore the question of cost. Nor could they ignore the generally unsatisfactory condition of the lists, owing to the failure of the Government to provide for their revision every year. In 1894, these disadvantages of the system established in 1885 were admitted by Sir John Thompson, when he introduced a bill providing that the Provincial lists should be taken as the ground-work of the Dominion lists, but should be revised by barristers appointed as under the Franchise Law of 1885. Sir John Thompson in 1894 stated that after an experience of eight or nine years the Government, of which he was Premier, had come to the conclusion that it was not worth the effort to keep the divergences that existed between the two sets of franchises. Sir John Thompson's bill, however, did not get beyond first reading; and it was left to the Liberals to continue their demand for a complete reform, and to bring about a return to the old system of provincial franchises for Dominion elections as soon as practicable after they were once more in a majority in the House of Commons.

The new Franchise Act provided that the qualifications necessary to entitle any person to vote at a Dominion election shall be "those established by the laws of that Province as necessary to entitle such person to vote in the same part of the Province at provincial elections"; that the polling divisions shall be those established under the laws of the Province for the purposes of provincial elections; and that the voters' lists "shall be those prepared for the several polling divisions so established, and which on the sixtieth day next preceding the day fixed for the nomination of candidates for such Dominion election were in force, or were last in force under the laws of that Province for the purposes of provincial elections."

One of the strongest arguments for the change made in 1885 was that a Dominion franchise would prevent the Provincial Legislatures having it within their power to disfranchise particular classes of voters. Prior to 1885, Nova Scotia had passed an Act depriving all Dominion civil servants and employes of

the Government within that Province of their right to vote at elections for members of the House of Commons at Ottawa. Prince Edward's Island also had a somewhat similar enactment. In the new Act there is a clause preventing these discriminations. It declares that no person possessed of the qualifications generally required by the Provincial law to entitle him to vote at a provincial election shall be disqualified from voting at a Dominion election merely by reason of any provision of the provincial law disqualifying him from having his name on the list or from voting (1) because he is the holder of any office, (2) because he is employed in any capacity in the public service of Canada, (3) or belongs to or is engaged in any profession, calling, employment, or occupation, or (4) belongs to any other class of persons who, although possessed of the qualifications generally required by the Provincial law, are by such law declared to be disqualified by reason of their belonging to such class.

The provincial lists, when complete for the purposes of provincial elections, are to be sent to the Clerk of the Crown in Chancery at Ottawa, and by him reprinted for use at Dominion elections. In the event of any person being omitted from the lists by reason of any provincial disqualification included in the clause which has just been quoted, he may on election day be permitted to poll on taking oath that except for this particular disqualification he is entitled to vote.

Were it not for the exception of Quebec and Nova Scotia, the franchises of the several provinces might be described as uniform. British Columbia, under the new arrangement, will elect its six members of the Dominion House of Commons by universal suffrage; so will Manitoba, which has seven members; so will Ontario, which has ninety-two; and the same suffrage prevails in New Brunswick, which has fourteen; and in Prince Edward's Island, which has five. The New Act does not apply to the Northwest Territories, which have four members in the Dominion Parliament. It applies to seven of the eight provinces, and out of the 209 members elected from these seven provinces, under the Distribution of Seats Act which followed the census of 1891, 174 members will be chosen by universal suffrage.

Quebec and Nova Scotia, which have not universal suffrage, are represented in the House of Commons by sixty-five and twenty members respectively. In the Province of Quebec, the franchise is nearly as complicated as was the Dominion franchise, which has been swept away by the Act of 1898. It includes owners or occupiers of real estate, valued at \$300 in cities, or \$200 in other municipalities, or which yields \$20 a year; tenants in cities paying a rental of \$30 a year, in other municipal divisions paying a rental of \$20; teachers in schools under the control of school commissioners or trustees; renters or retired farmers possessed of \$100 a year; farmers' sons working on their parents' farms; sons of owners of real property living with parents, and fishermen, owning boats and fishing gear, or shares in ships. In Nova Scotia, real property of the value of \$150 confers the franchise, or personal and real property together valued at \$300; so does an income of \$200 a year. Occupation of property of the value of \$150 also confers the franchise; and in Nova Scotia the provision for farmers' sons, sons of owners of real estate, and fishermen are much the same as under the Franchise laws of Quebec.

In most of the Provinces the electoral lists are prepared by officers in the service of the municipalities and subsequently gone over by the local judges. The exceptions as regards revision by judges are Manitoba, Prince Edward's Island and Nova Scotia. In Prince Edward's Island there never have been any electoral lists. The plan in use is much similar to that in vogue in the counties of England before the Parliamentary Reform Act of 1832. On election day, the voter appears at the polls, and takes oath that by residence and payment of taxes he is entitled to vote.

While under the new plan there will be some lack of uniformity in qualification, owing to the property qualifications in Quebec and Nova Scotia, there will be uniformity all over the Dominion as to disqualifications. The new Act disqualifies and renders incompetent to vote (1) any person who at the time of a Dominion election is a prisoner in a jail or prison undergoing punishment for a criminal offence; (2) or is a patient in a lunatic asylum, (3) or is maintained in whole or in part as an

inmate receiving charitable support or care in a municipal poor house or house of industry, (4) or is an inmate receiving charitable support in an institution receiving aid from the government of the province. The Act also leaves untouched the Dominion enactments disfranchising voters who have taken bribes.

The measure puts an end to a controversy which has existed for twenty years; which during that time has formed one of the dividing lines between parties in Dominion politics; and to use a word much in vogue in Parliamentary debate at Ottawa, it implements to the full one of the pledges made by the Liberals prior to the General Election of 1896.

III.—THE BRITISH PREFERENTIAL TARIFF.

With the exception of an advance in the duties on sugars, no noteworthy changes were made in the Parliamentary session of 1898 in the general list of the customs tariff. It was left as it stood after the revision of 1897, and contained nearly all the protective features of the National Policy tariff in force from 1879 to 1897. An important change, however, was made in the clauses dealing with preferential trade, which were so altered as to make the preference exclusively British.

From Confederation until 1879, when Canada had tariffs for revenue only, all countries were treated alike, and imports from Great Britain paid the same rates as those from the United States. This principle held good in the National Policy tariffs from 1879 to 1897; for manufacturers, who supported the late Sir John Macdonald and the Conservative Premiers who succeeded him, were as anxious for protection against Britain as against the United States. During these years the Liberals were in Opposition, and they continuously agitated for a return to the principle of a tariff for revenue only. But after they had obtained a majority in the House of Commons at the elections in 1896, the Liberals shifted their ground. When the tariff had been revised in 1897, it was still practically as much a protective tariff as any of the tariffs passed from 1879 to 1896, by the Conservatives.

The first tariff of the Laurier Government differed from the National Policy tariffs principally in the fact that it established

a system of preferences under which duties in the general list were reduced one-eighth. These preferences were not exclusively British. They were not put forward as such by Mr. Fielding, the Finance Minister, when he introduced the new tariff on the 3d of April, 1897. On the contrary, he then announced that Canada was disposed to deal favorably in her tariff with any country which would deal favorably with her, and that the concessions then about to be made were available for any country which would make equal concessions in its tariff in favour of the Dominion.

From Great Britain no concessions were asked. Great Britain was to enjoy at once and without any terms the preference which that tariff established. This manner of making the concession to Great Britain largely accounts for the popular impression in England that the preferences of 1897 were intended to be exclusively British. At the time these concessions were made, it was the opinion of the Laurier Government that no other country but Great Britain could enjoy them without making equal concessions to Canada. But this opinion proved to be a mistaken one. Germany and Belgium claimed the preferences by virtue of their commercial treaties with Great Britain.

The Dominion Government submitted the question to the Law Officers of the Crown in London. It was put before them by Sir Wilfrid Laurier and Sir Louis Davies, the Minister of Marine and Fisheries, aided in the legal argument by Mr. Edward Blake, formerly leader of the Canadian Liberals, now one of the Irish Nationalist members of the Imperial Parliament. The Imperial authorities decided that under the British commercial treaties with Germany and Belgium, those countries were entitled to the same tariff conditions in Canada and all other British colonies as were conceded to Great Britain. It was also determined that countries having favoured nation clauses in their treaties with Great Britain, were entitled to the same privileges in connection with colonial tariffs as Germany and Belgium. These decisions, together with the Franco-Canadian treaty, practically threw the preferences open to the world with the exception of the United States, which had no treaty of this description with Great Britain.

Some thirty countries had to be admitted to the preferential schedules of the first Fielding tariff. New South Wales, British India, the Netherlands and Japan, came in by reason of concessions made in their tariffs to Canada. Belgium and Germany came in by virtue of their commercial treaties with Great Britain. France, Algiers and the French Colonies were admitted by virtue of the French-Canadian treaty which, when it was made, received the sanction of the Dominion Parliament. Argentina, Austria, Hungary, Bolivia, Columbia, Denmark, Persia, Russia, Sweden and Norway, Tunis, Venezuela, Switzerland, Liberia, Morocco, Salvador, South African Republic, Tonga and Spain, all participated in the reduced rates by virtue of favoured nation clauses in their treaties with Great Britain.

It will thus be seen that the United States was the only country which received no advantages under the tariff of 1897, and that it alone among exporting countries paid the full rate of duties during the period from April, 1897, until the end of July, 1898, while the preferential reduction of one-eighth from the general list was in force. Had the United States made any overtures to Canada, and followed them up with tariff concessions equal to those made by Canada for Great Britain, there was nothing in the Tariff Act of 1897 to have prevented the United States from obtaining the advantages of the preferential schedules.¹

All the Colonial Premiers were in London for the Victorian Jubilee celebration at the time the Law Officers determined that the German and Belgium treaties were binding on the colonies, and applicable to the tariff concessions made by Canada to Great Britain. After the determination had been made known, the Premiers met in London, and passed a resolution "unanimously and earnestly recommending the denunciation, at the

¹ The clause read as follows: "When the customs tariff of any country admits the products of Canada on terms which, on the whole, are as favourable to Canada as the terms of the reciprocal tariff herein referred to are to the countries to which it may apply, articles which are the growth, produce, or manufacture of such country, when imported direct therefrom, may then be entered for duty, or taken out of warehouse for consumption in Canada, at the reduced rates of duty provided in the reciprocal tariff set forth in schedule D to this Act."

earliest convenient time, of any treaty now hampering the commercial relations between Great Britain and her Colonies." They moreover adopted a resolution looking to action by other colonies in the same direction as that taken by Canada in 1897. "In the hope of improving the trade relations between the Mother Country and her Colonies," read this second resolution, "the Premiers present undertake to confer with their colleagues with a view to seeing whether such a result would be properly secured by preferences given by the colonies to the products of Great Britain."

These resolutions were submitted to the British Government through Mr. Chamberlain, the Secretary of the Colonies, and a few days later the Belgium and German treaties were denounced by the Foreign Office. These treaties expired at the end of July, 1898. With the termination of the treaties with Belgium and Germany, the hampering favoured nation clauses of other treaties also ceased to complicate Canadian relations with Great Britain; and when the Dominion Government and the Dominion Parliament again approached the tariff in 1898 the ground was entirely clear. At the time the tariff of 1897 was passed, it was enacted that in 1898 the reductions in the preferential schedules should be one-fourth instead of one-eighth. This enactment was embodied in the new tariff; but in place of the preferential clause of 1897, a new one was adopted, establishing preferences exclusively in favour of Great Britain and British Colonies. The new clause provides that

Articles which are the growth, produce or manufacture of any of the following countries may, when imported direct into Canada from any of such countries, be entered for duty or taken out of warehouse for consumption in Canada at the reduced rate of duty provided in the British preferential tariff set forth in Schedule "D"¹ to this Act:—

- (a) The United Kingdom of Great Britain and Ireland.
- (b) The British Colony of Bermuda.
- (c) The British Colonies commonly called the British West Indies, including the following:—

¹ Schedule D is the one enacting the twenty-five per cent. reduction in duties. Included in it is a section which sets out that the reduced duties shall not apply to wines, malt liquors, spirits, spirituous liquors, liquid medicines, and articles containing alcohol, tobacco, cigars and cigarettes.

The Bahamas.

Jamaica.

Turks Island and the Caicos Islands.

The Leeward Islands (Antigua, St. Christopher-Nevis, Dominica, Montserrat, and the Virgin Islands).

The Windward Islands (Grenada, St. Vincent and St. Lucia).

Barbadoes.

Trinidad and Tobago.

British Guiana.

- (d) Any other British Colony or possession the customs tariff of which, on the whole, is as favourable to Canada as the British preferential tariff herein referred to is to such colony or possession.

Provided, however, that manufactured articles to be admitted under such preferential tariff shall be *bona fide* the manufactures of a country or countries entitled to the benefits of such tariff, and that such benefits shall not extend to the importation of articles into the production of which there has not entered a substantial portion of the labour of such countries. Any question that may arise as to any articles being entitled to such benefits shall be decided by the Minister of Customs, whose decision shall be final.

The Minister of Customs, with the approval of the Governor in Council, shall determine what British colonies or possessions shall be entitled to the benefits of the preferential tariff under clause (d) of this section.

It was the intention of the tariff of 1897 to admit only Great Britain to the preferential arrangement without calling upon her to make terms for Canada. The other British Colonies were to come in when they had made equal concessions to the Dominion, and it was on these terms that between April, 1897, and July, 1898, New South Wales and British India came into the preferential arrangement. In the 1898 tariff, however, the British West Indian Possessions named in sections B and C were admitted at once to the twenty-five per cent. reduction without being asked to make terms for Canada. The reason for this concession was the distressed condition of the West India Islands, due to the depression in the sugar trade—a condition of things which has been investigated by a Royal Commission and which in 1898 was giving serious concern to the Colonial Office; and which ultimately led to a grant by the Imperial Parliament in the closing days of the session of 1898.

The tariff and the general question of trade relations of Canada with Great Britain were much discussed in the session of 1898, both at the time the preferential tariff was enacted, and in the debate on the Address to the Crown at the opening

of Parliament. These discussions elicited two important statements from the Treasury Bench; one with reference to the tariff, and the other with respect to reciprocal trade relations with Great Britain. When Mr. Fielding, the Minister of Finance, introduced the tariff resolutions he reiterated his warnings of 1897 to Canadian manufacturers that they must not regard the schedules of 1897 and 1898 as permanent. "In saying this," he said, "I am not actuated by any unfriendliness towards manufacturers. While they are in a good position to-day it would be a mistake for them not to realize that Canada has turned her face away from a high tariff policy, and whatever progress is to be made in the future must be in the direction of greater freedom of trade."

Sir Wilfrid Laurier in the House of Commons made the statement with respect to reciprocal trade relations with Great Britain. At the General Election in 1896, he appealed to the electors to return the Liberal party to power in order that a Liberal Government might be charged with the duty of sending commissioners to England to secure preferential treatment for Canadian produce. At Liverpool in 1897, Sir Wilfrid Laurier adverted to preferential trade, and at a banquet presided over by the Duke of Devonshire declared that protection had been so disastrous to Canada that Canada did not desire to see Great Britain re-establish a protective system, even in order to establish preferential terms for her own imports.

As soon as Parliament met in 1898, Sir Charles Tupper and Mr. Foster, the Opposition leaders, called attention to these divergent statements on the part of the Premier, and also to the statements made in the "Toronto Globe" that Mr. Chamberlain, the Colonial Secretary, had made a specific offer of preferential treatment for the colonies. Much pressure was brought on the Premier to affirm or deny the statements made in the "Toronto Globe." But he declined to do so on the ground that the London conference between the Colonial Premiers and Mr. Chamberlain was private. As to his divergent utterances in Canada and in England, he declined to discuss them, because at the present time there was no likelihood that the British Parliament would impose duties on foreign food

stuffs in order to make preferential terms for imports from Canada or any other of the British Colonies.

IV.—THE PROHIBITION PLEBISCITE.

In the Ottawa platform of 1893, that on which the Liberals went into the General Election of 1896, there is a plank which sets forth that as public attention was at that time much directed to a consideration of the admittedly great evils of intemperance, "it was desirable that the mind of the people should be clearly ascertained on the question of prohibition by means of a Dominion plebiscite." Sir Wilfrid Laurier, Sir Richard Cartwright, and the other Liberal leaders in Dominion politics, all accepted this plank, and pledged themselves, if the Liberals carried the election, to pass a bill for a plebiscite. An Act to this end was passed in the recent session of Parliament, and on September 29th the electors of Canada went to the polls to mark ballots drawn up thus:

	YES.	NO.
Are you in favour of the passing of an Act prohibiting the importation, manufacture or sale of spirits, wine, ale, beer, cider and all other alcoholic liquors for use as beverages?		

At the present time \$7,500,000 of the revenue of the Dominion Government, about one-fifth of the whole, is raised by import and excise duties on spirits, wines, and beers. This sum would have had to be made good if a prohibition system, general all over the Dominion, had been established. Before the Plebiscite Bill was drafted, the liquor interest urged the Government to state on the ballot papers, that a deficiency in revenue must inevitably follow a Prohibition Act, and that it would have to be made good by new and, in all probability, direct taxation, of which there is none at present. The liquor interest desired that it should be brought home to every voter that new taxation would be the penalty of the adoption of prohibition. The Govern-

ment, however, after a caucus of its followers in the House of Commons, declined to complicate the issue by bringing in the question of revenue and taxation, and the Act went through Parliament providing that the vote should be taken simply on the question for or against prohibition.

There has long been a prohibition party in the Dominion Parliament, although it has never been organized as a separate party. Its members sit on both sides of the House, and when the Plebiscite Bill was submitted to Parliament by Mr. Fisher, the Minister of Agriculture, it met with the approval of Mr. Foster, one of the leaders of the Conservative Opposition. In 1889, when Sir John Macdonald and the Conservatives were in power, the House of Commons adopted a resolution declaring that it would be expedient to adopt prohibition "when the public sentiment of the country is ripe for the reception and enforcement of such a measure."

In the interval between the adoption of the resolution just quoted and the introduction of the Plebiscite Bill in the House of Commons, five of the eight Provinces had decided by popular votes in favour of prohibition. Manitoba led off in the Provincial Plebiscites, which were taken at the local elections, either for the Legislatures or the municipal councils. In 1892, prohibition was carried in that Province by 19,000 to 7,000 votes. In 1893, Prince Edward Island declared in favour of prohibition by 10,000 to 3,000 votes. In 1894, both Ontario and Nova Scotia decided in favour of prohibition, Ontario by 192,000 to 111,000, and Nova Scotia by 43,000 to 12,000. Quebec, British Columbia, and the Northwest Territory were the only Provinces in which the opinion of the electors had not been ascertained.

Both in the House of Commons and in the Senate, the Plebiscite Bill was treated less as a party question than any other issue which came before Parliament in 1898. There were some protests against the new departure; against Parliament abrogating any of its functions through the use of the Plebiscite. An unsuccessful attempt was also made to get the Government to pledge itself as to when it would introduce the Prohibition Bill to Parliament, in the event of the ballot being in the affirmative. The Government would make no

pledges, nor would it declare in the bill what it would regard as an affirmative vote.

When the vote was taken on the 29th of September, not more than one-quarter of the electorate went to the polls. This indifference was attributed to the fact that prohibition was the only matter to be voted upon. There was a majority in favour of prohibition; but it numbered only 24,090. Quebec was the only Province that voted against prohibition. No declaration of policy has yet been made in behalf of the Government. There is, however, no expectation that legislation will be attempted. The Plebiscite was taken on the Provincial franchises, and as at a general Parliamentary election the official expenses were paid out of the Dominion Treasury.

V.—POST OFFICE AND MINOR ECONOMIC REFORMS

Among the less important measures of the session were a resolution reducing the rate of interest in Government savings banks, and an Act establishing a two-cent domestic letter postage, and also curtailing the privileges of free transmission of newspapers through the post office.

When the Laurier Government took office in 1896, the savings bank rate of interest stood at three and a half per cent. In July, 1897, it was reduced to three per cent., and by the recent measure it was reduced to two and a half per cent. The Government made the last reduction because it is paying only two and seven-eighths for its loans contracted in 1897, and because the principal municipalities in Canada are paying about the same rates for their loans. The Conservatives in the House of Commons protested against the reduction to two and a half per cent., on the ground that higher rates should be paid to encourage thrift, and they carried their protest to a division.

Under the new arrangement for carrying newspapers through the mails, publishers are to pay one-half cent a pound from January 1st to June 1st, 1899; and from July 1st, 1899, one cent a pound. From 1882, all newspapers sent out from the office of publication have been carried free all over Canada. In 1897, 16,500,000 lbs. of newspapers were so handled by the post office. The Act of 1898 does not abolish entirely this privilege; but

restricts it to a distance of ten miles from the office of publication, and to those places which have not free delivery.

The curtailment of the privilege found support from both political parties, and even from newspaper proprietors who are of the House of Commons, although Sir Charles Tupper, the leader of the Opposition, opposed it and stigmatized it as an attempt at the suppression of the newspaper. He further declared that it struck "at the great organs of communication between Parliament and the people." A curious note in the discussions was the way in which several of the opponents of the reform persisted in describing the postal charges as a tax. Sixteen years of free postage seem to have given these members of the House a warped idea of the difference between a tax and a payment for specific services.

In 1897, the Laurier Government followed the action taken by the Salisbury Government in 1891, and introduced anti-sweating clauses into Government contracts. It was stated, in reply to questions during the course of the session of 1898, that these clauses had been introduced into contracts for militia clothing, and for mail bags and other supplies for the Post Office Department.

VI.—THE ALIEN LABOUR LAW.

The Dominion Alien Labour Law, passed in the session of 1897, was patterned after the United States Contract Labour laws of 1885 and 1887, which have caused so much friction on the Canadian border. The Canadian Act, however, differed from the American Act in that it could be put into operation only at the instance of the Attorney General. To use an Ottawa phrase, the Act was tied with a string. It was a private member's measure, to which the Government only grudgingly gave its support. The principle of it was strongly deprecated at the time by Sir Wilfrid Laurier, and especially by Sir Louis Davies, the Minister of Marine and Fisheries, who in committee adroitly attached the string. When Parliament was prorogued last year, there was a feeling, not confined to either side of the House of Commons, that little use would be made of the Act.

Several times during the session of 1898, questions were

addressed to the Government as to the way in which the measure was being enforced. The substance of the replies was that fourteen inspectors, mostly customs house officers, had been charged with the duty of putting the Act in operation—six in Ontario, five in Manitoba, one in British Columbia, and two in the Northwest Territories; that no American had been deported across the border for entering Canada contrary to the provisions of the Act; and that the instructions to the Dominion inspectors were “to enforce the Canadian Act whenever the Americans on their side of the adjoining frontier were enforcing the United States Act against Canadians.” The statement quoted is from an answer by Mr. Paterson, Minister of Customs, to a question asked on April 25th, as to the enforcement of the Act at Fort Erie. It may be taken as representing the policy of the Government in respect to the Alien Labour Law.

The Laurier Government has never concealed its dislike to the Act, and has never regarded it as other than a temporary measure. That this is so may be judged from a statement made by Sir Wilfrid Laurier in the House of Commons, later than the answer of Mr. Paterson. The Premier’s statement was made at the sitting at which Sir Louis Davies reported to the House the success attending his mission to Washington in connection with the appointment of an international commission to settle the questions outstanding between the United States and the Dominion. The Premier was then asked, had the Government appointed an Alien Labour Law inspector at Hamilton? “The Government,” he replied, “had taken no steps to appoint an agent at Hamilton, and I have good reason to hope and believe that after a few months there will be no cause for the appointment of such officers.”

This answer affords an indication of the hopefulness with which Canada went into the arrangement for an international commission. For the United States, the Alien Labour Law, as it affects Canada, is a small local question. For Canada, the question is more important, as the actions of the United States labour inspectors for twelve or thirteen years past have caused much friction, especially on the Ontario border, and have given Parliament and successive Dominion Governments more trouble than perhaps any one of the seven or eight questions which are to come before the Commission.

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THE TIN PLATE INDUSTRY.

I.

BY tin-plate is meant a sheet of iron or steel varying in thickness from 22 to 30 wire gauge coated with tin. In the language of the trade, plates before they are covered with tin are referred to as "black plates." These plates are made in several sizes, but the standard is a plate 14 x 20 inches and when coated with tin is placed in a box containing 225 sheets.¹ These boxes weigh 108 lbs. Besides the regular commercial tin-plate is another commodity made by the mills which is called "terne plate." A terne plate is an iron or steel sheet covered with an alloy of lead and tin, generally two-thirds lead and one-third tin. The terne plate is used very largely for roofing and cornice purposes.

The method of manufacturing tin and terne plates is rather simple so far as the process is concerned, but a great deal of skill is required to turn out good plates. The process begins with the rolling of thin sheets from billets of steel especially prepared for the industry. When the required thickness has been reached the plates are sheared to a size and made ready for pickling. A plate is pickled when placed in a bath of sulphuric acid and water. This process clears the sheets of scales. When taken out of the pickling bath the plates are rinsed free of the acid and packed in pans with layers of sawdust between the plates. The pans are then carefully sealed and put in an annealing furnace, where they are allowed to remain for ten hours. The heat of the furnace is gradually reduced and the plates allowed to cool slowly. A second rolling is now necessary. This is done by passing them through three sets of cold steel rollers. Another sulphuric acid bath and annealing are undertaken and the plates are ready for tinning. In the tinning department the plates are first coated with grease, then

¹ Called by the trade IC, 14 x 20, and weighing 50 lbs. or less per 100 sq. feet. Other grades are IX, weighing between 50 and 62½ lbs.; and IXX, weighing 63 lbs. per 100 sq. feet.

dipped into the tinning pot, taken out and placed in a bath of molten tin. The plates are brushed, again greased and passed through melted tin for a third time. The plates are now allowed to cool, carefully wiped free of grease, assorted and packed in boxes according to quality. This is the process of tin-plate manufacture.¹

The tin used in the process comes from several sources. The best of these is found in Australia and the Straits' Settlements. The latter furnish the most desirable tin, known as Banca tin. This is regarded as the purest, and is in consequence more sought after by the manufacturers of tin-plate. The Cornwall mines were discovered about 55 B. C. and for twelve centuries were the one source of this mineral. In 1240 tin was found in Bohemia. Five hundred years later, in 1760, the Banca mines were opened. In the following century Australia became a producer of block tin on a large scale. From 1872 tin has been found in commercial qualities in New South Wales, Queensland and Tasmania. The United States have not been so fortunate although many attempts have been made from time to time to find tin. Tin was discovered in California as early as 1840, but there was no mining done until 1868. Only for a short time were the mines operated; they were then closed down, and remained so until 1888. In this year an American company bought the property with the intention of operating, but it was sold to an English syndicate before two years had passed.² Something like \$800,000 were spent, but no special results were secured. The total product of the mine was 269,000 pounds of tin valued at \$56,000.³ The Harney Peak mine is the story of another futile attempt to get tin in commercial quantities. The Harney Peak, as it is familiarly called, is situated near Custer City, South Dakota. A great deal of money has been spent in the development of this mine, but it is doubtful if more than ten tons of metal have been taken out of the ground.⁴ The English capitalists were also heavily

¹ Senate Ex. Doc., 52 Cong., 1 Ses., Vol. 6, No. 102, p. 11. J. D. Weeks in *Tin Plate Industry*, Pittsburg, 1892.

² Senate Ex. Doc., 52 Cong., 1 Ses., Vol. 6, No. 102, p. 45.

³ *Mineral Industry*, Vol. 4, p. 542.

⁴ *Supra*—*Ibid.*

interested in this attempt. In Alabama, North Carolina, and Virginia tin-bearing rock has been found. In no sense can the United States be regarded as a tin-producing country.¹

The cost of mining tin varies with locality, kind of labor employed and character of the ore. The average cost of breaking and selecting ores in the Cornish mines is from 4s. to 8s. per ton of ore; the depreciation of machinery is estimated at 2d. The total mining charges average £12 to the ton of tin, the dressing costs £9, and management, expense of buildings, and wear and tear on machinery carry the amount to £35 per ton of tin. This statement of cost is not altogether accurate, but is probably very near the truth. Banca mines have the advantage of cheap labor. The price paid there for experienced labor is £1 per month. The workmen average twelve hundred weight of metallic tin per year.² The yield of the Cornwall mines is about 20% of the tin ore or 45 lbs. of tin to the ton of ore.

Before the ore is ready for reduction to pig tin, the sulphur and arsenic must be driven off by roasting the ore. This requires from twelve to eighteen hours. The consumption of fuel for refining is thirty to thirty-five hundred weight per ton of metallic tin. The tin of the Banca mines is almost pure, so that it has a decided advantage in cost of production. Although England is so near to the Cornish mines the price of block tin in London is about the same as in New York. The prices given on March 4, 1898, at New York, per long ton of 2240 lbs., was \$310.44. At London Straits' tin (Banca) was sold for \$311.10.³ It will be seen from this statement that the manufacturers of tin-plate in England have no particular advantage over the American producers so far as the raw material is concerned. It might be urged that the Cornish mines undersell the Straits, but the

¹ NOTE.—The total tin production of the world in 1895 was estimated at 186,786,880 lbs. Of this amount the United States imported 54,252,045 lbs., or 29 per cent., at a valuation of \$7,405,619. See *U. S. Geological Survey*, 1895; *Mineral Industry*, Vol. i, p. 457.

² *Tin and Terne Plate*, J. D. Weeks, p. 13.

³ The prices given above are taken from the *Monthly Summary of Finance and Commerce of the U. S.*, Feb. 1, 1898, pp. 1207, 1218. The price in New York was 14.35c. per lb., and £64. 16s. 3d. per ton in London.

fact is that Cornish mines are not able to supply all the English demand for tin. Naturally the price of tin is governed by the price of Straits tin.

II.

The United States have always been a large consumer of tin-plate. In 1892 this country was taking 60% of the English production of the commodity. A remarkable falling off in the imports occurred in 1898. This decline began with the tariff legislation of 1890. The table below tells the story more forceably than words can.

IMPORTATIONS OF ENGLISH TIN PLATE.

1893,	.	.	.	.	.	.	.	.	628,425,902 lbs.
1894,	.	.	.	.	.	.	.	.	454,160,826 "
1895,	.	.	.	.	.	.	.	.	508,038,938 "
1896,	.	.	.	.	.	.	.	.	385,138,983 "
1897,	.	.	.	.	.	.	.	.	230,073,683 "

A similar decline has taken place in the imports of black plates not yet tinned, as indicated in the following table.

IMPORTATION OF ENGLISH BLACK PLATES.

							Long Tons.	Lbs.
1893,	.	.	.	.	.	.	-----	-----
1894,	.	.	.	.	.	.	-----	-----
1895,	.	.	.	.	.	.	8,914	19,967,560
1896,	.	.	.	.	.	.	3,128	7,006,720
1897,	.	.	.	.	.	.	689	1,554,360
1898, ¹	.	.	.	.	.	.	171	381,040

The demand as well as the consumption of tin and terne plates has not decreased in any way, so that the source of supply must be looked for elsewhere than in England. This demand is therefore largely supplied by the American industry. The statement here made is further upheld by the fact that in 1892 some 13,642,719 lbs. of tin-plate were made in the United States, thirty-one per cent. of which was manufactured from foreign black plates. The amount had increased enormously in 1897, so that 446,982,063 lbs. were produced, and of this amount only one per cent. was made from foreign black plates.² These facts certainly indicate the existence of a rapidly growing industry.

¹ Jan. and Feb., 1898. *Tin and Terne*, Mch. 24, 1898.

² Report of Special Agent Ayer, Jan., 1898, Treasury Dept., p. 8.

Leaving the matter of the tariff out of consideration for the time being, the United States were handicapped in the early history of the industry by the high price of labor, the lack of technical knowledge concerning the industry and the distance of iron ore from fuel. These difficulties have been overcome in some measure. The industrial depression from 1892-1897 was a decided aid to the growing industry. The wages of labor fell about fifteen per cent. in this period, although there is a marked tendency at present to recover from the decline. The fall in the wages of labor placed the English and American makers more nearly on a basis of equality. As a general thing American labor is quicker and works harder than even the English workingman. This does not hold true in the tin industry. The reduction in wages just referred to was not sufficient of itself to make up differences in cost. According to Sir R. Griffen, the Welsh laborer averages £1. 2s. 5d. per week, equivalent to \$5.46, while in Pennsylvania the wages average \$10.68 per week.¹ The higher American wages are not accompanied by an increased efficiency of labor. Taken all in all, the Welsh producer makes tin-plate about 30% cheaper than the American, but the latter when purchasing from the former has never got the benefit of the \$2.20 per box cost. Tin can be delivered in New York, freight paid, for \$2.49 per box² by the English merchant. Tin never reached this point until the Americans began to make it.

The knowledge of the method of manufacture had also to be acquired. This gave for a while an additional advantage to the English makers. The distance of ore from fuel was another question involving delay and expense. In this matter the last five years have seen a remarkable improvement. Ore is now mined by steam shovels and then conveyed in steel barges to the ports of Lake Erie, where it is sent by rail to the smelters. The old method of bringing fuel to the ore has been abandoned, the ore is now brought to the fuel. Lower freight rates have made this possible. So cheap has steel become in this country through these various processes and changes that it is now exported to England.³

¹ *Eng. Foreign Office Report*, Mis. No. 26, p. 10.

² *Ibid*, p. 11.

³ *Eng. Foreign Office*, Mis. Rep. No. 426, p. 5.

With the cost of steel just given the expense of production would be cut down to \$2.56. The improved machinery will still further reduce this price to the one now ruling in England, \$2.20. As will be remembered, the American wages averaged about twice those paid in Wales. This will materially increase the cost of the American product, so that it is not likely that American tin-plate is manufactured under a cost of \$2.75 per box for first class material. The present price of tin-plate in this country leaves a margin of 75 to 85 cents per box for our producers. When the commissions and profits of middle men are taken from this, it will be seen that tin-plate is being sold close to cost. If this is true, an adjustment of prices to the industry and the demand must follow which will again give the English industry some hope of entering our markets.

Properly-equipped machinery was difficult to secure at first. This part of the problem has been met by inventions and improvements over the English machines. In this matter it is probable that the Americans have been most successful in reducing the expense. The preparation of steel is the best example. In tinning machinery the advance has been much slower and less satisfactory. Under the English system the mills are run by one central engine, while in this country the tendency has been to run an engine for each set of mills. This increases the expense for coal and adds to the cost of manufacture, but gives greater efficiency. The mills in the United States are better built and can do more work. It remains to be seen whether the industry will warrant the elaborate preparations which have been made.

III.

The legislation for the establishment of the tin-plate industry rests upon three ideas; first, that seventy millions of people should not depend upon Welsh works for tin-plate; second, that the foreign tin-plate is poorly made and does not meet our particular wants; third, that the country needs a new industry in which more labor can be employed. In these three statements we have a blending of the commercial, the economic and the political. So long as the foreign makers possessed a

monopoly, they refused to listen to any suggestions from this side of the water concerning the improvement of their plate. There were also times when the foreign dealers took advantage of the scarcity of tin-plate in this country to force up the price. This attitude naturally influenced very considerably the American mind. Behind the scenes another class, the men who owned supposed tin mines, endeavored to secure the attention of Congress. They were anxious that the tin-plate industry should be encouraged, provided that block tin was put on the tariff list. Manufacturers of steel were ready to make tin-plates if adequate protection was given them. When the various elements, just mentioned, were coupled with public opinion, which after all was public indifference, and brought to bear upon Congress, the necessary legislation was forthcoming. The new industry having received these necessary conditions, it was considered that time alone was all that was needed to bring it into full fruitage.

Previous to 1890 block tin had been on the free list for twenty years, while tin-plate had been subject to a duty since 1864. Under the tariff of 1883, no tin-plate was produced in this country. The consumers of the article paid \$35,000,000 in duties for the support of an industry that did not come into existence.¹ The probable reason for the failure to establish an industry was the lack of facilities for making steel plates. In addition to this the financial condition of the country hardly warranted any extension of enterprise. The tariff of 1864 placed a duty of 2½ cents per pound on "all imports of tin-plates and iron galvanized, or coated with any metal by electric batteries or otherwise." The Treasury Department so construed the law that a duty of 15% "ad valorem" was substituted in the place of the original amount.² Although the protection thus given was low, nevertheless several plants were built in the hope that the high price then ruling would continue. It did not do so, and the plants were forced out of the business.³

¹ House Report, 52 C., 1 S., Vol. 4, No. 1040.

² Ibid.

³ Plants were established at Wellsville, O., 1872; Leechburg, Pa., 1873; Demmler, Pa., 1875.

There was no real effort to manufacture tin-plate until the McKinley Bill was adopted. This act received the sanction of Congress Oct. 1, 1890. The clause relating to tin went into effect July 1, 1891. It was declared that after that date tin and terne plates should pay a duty of 2.2 cents per pound instead of one cent as before. The very significant addition was made that after Oct. 1, 1897, tin and terne plates lighter than 63 pounds per one hundred square feet should be admitted free of duty, if it shall be made to appear to the satisfaction of the President that the aggregate quantity of such plates lighter than 63 pounds per one hundred square feet, produced in the United States during either of the six years next preceding June 30, 1897, has equaled one-third the amount of such plates imported and entered for consumption during any fiscal year after the passage of this act and prior to Oct. 1, 1897."¹ Several conditions were added to this part of the bill with the intention of making out the highest production and the smallest importations. Under the rule of the Treasury Department it was permissible to compare the highest production of any one year with the lowest importation of any single year. Imported plates upon which a drawback had been received, when exported in the form of manufactured articles, were not to be counted as importations. On the other hand, black plates when imported for tinning and coated in this country were to be regarded as part of the country's product. The miners of tin were not forgotten in the bill. A duty of four cents per pound was placed on pig tin. The provisions of this part of the act were to take effect July 1, 1893, and to continue in existence two years. If at this time it could be shown that the production of block tin had reached five thousand tons the duty was to be continued.

Many protests were made against this legislation before and after the enactment of the bill. The Tin-plate Consumers' League, consisting of the representatives of the canning, oil and manufacturing interests, sent delegates to the House Committee of Ways and Means.² Soon after the passage of the McKinley

¹ McKinley Bill, Oct. 1, 1890.

² House Reports, 52 C., 1 S., Vol. 4, No. 1040.

Act the Republicans were defeated in the Congressional elections. Naturally the opponents of the tinning classes hoped that some reactionary legislation would be brought about, and this change in the character of Congress encouraged the interests above mentioned to appear before the committee. Several attempts were made to alter the bill, and these furnished occasions for the appearance of various delegates before the Committee on Ways and Means. The introduction and the consideration of a bill to reduce the duty on tin-plate to one cent until Oct. 1, 1894, after which date the articles should be admitted free, fairly represents the views held in Congress on the subject.¹ Two reports were presented by the House committee. The majority report upheld the bill on the ground that little or no tin-plate had yet been produced, and that the legislation thus far resulted in the forestalling of the market and produced a speculation in prices ruinous to consumers. In support of these arguments the statements of companies and business firms were quoted in the majority report. These all showed higher prices and a very small manufacture. The minority report was a vindication of the tariff and the need of such an industry. It was shown that in the twenty years from 1871-1891 the consumers of tin had paid foreigners \$307,341,404, exclusive of freights and importer's profits, for tin and tin-plates. The bill finally reached the Senate Finance Committee, but was never acted upon.²

A similar attempt was made to reduce the tariff on block tin. On February 27, 1893, a bill was introduced by the House Committee of Ways and Means to admit free of duty on and after July 1, 1893, imports of bar, block and pig tin, cassitevite or black oxide of tin.³ The committee presented with the bill much evidence to show that the then existing price of raw tin was a hardship to consumers. The canning interests found that they were compelled to pay \$1.15 per dozen of one quart cans in 1893 as against 70 cents in 1890. In this connection

¹ House Reports, 52 C., 1 S., Vol. 4, No. 1040.

² *Nation*, Mch. 16, 1893.

³ House Reports, 52 C., 2 S., Vol. 3, No. 2583.

the statement of Mr. Schiver, president of a Baltimore canning company, was offered by the committee as evidence. Mr. Schiver stated that up to February, 1893, he was unable to secure any American plate, and that he was now paying 33 per cent. more for tin goods than was asked in Europe.¹ The evidence of the committee, together with their favorable report, were not sufficient to persuade Congress to make the bill a law. The Senate as well as the House was besieged with memorials praying for the repeal of the duty on block tin.² But to no purpose. The McKinley Bill was not modified until the Republican Congress had been superseded by a Democratic majority. This change occurred in the fall of 1893.

The Wilson Bill of 1894 reduced the rate on tin and terne plates from 2.2 cents per pound to $1\frac{1}{5}$ cents per pound, and block tin was placed upon the free list. The Democratic Congress soon after gave place to a Republican one, and the Dingley Bill of 1897 again modified the tariff on tin so that the rate was placed at $1\frac{1}{2}$ cents and block tin allowed to remain on the free list.

The act of 1890 was the creator of the tin-plate industry. The incentive from it was sufficiently great to draw a good deal of capital into the field. Although the legislation since then has made a lower rate, nevertheless the industry was well enough established in the years intervening between 1890 and 1894 to retain its place and to grow. The elements of growth more powerful than legislation, in the opinion of the writer, were the low prices of steel and wages existing during this period.

It remains to test this industry on the following points: (1) growth of production, (2) reduction of imports, (3) number of plants, (4) comparison of prices, (5) effect on foreign manufactures, and (6) probability of continued growth. This will be done in the final section of our study.

¹ House Reports, 52 C., 2 S., Vol. 3, No. 2583.

² Senate Mis. Doc., 52 C., 2 S., Vol. 1, No. 55.

IV.

1. The special agent of the Treasury Department in a report of April 26, 1892, states that "the firms replying to his inquiry declared that they had manufactured no tin-plates as yet."¹ The report of the same agent gives for the year ending June 31, 1892, thirteen million pounds as the product of American tin-plate. The industry evidently did not get well started until the middle of the year, 1892, but from that time the output has steadily increased. The table given below indicates the rapid development of the industry. The yearly production of tin-plate now reaches nearly five hundred million pounds. The

PRODUCTION OF TIN PLATE IN THE U. S.		
Year.	Pounds.	Per cent. from foreign plate.
1892,	13,646,719	31.88
1893,	99,819,212	56.32
1894,	139,223,467	38.26
1895,	193,801,073	17.15
1896,	307,228,621	1.38
1897,	446,982,063	.01

—From Special Report to Treasury by Ira Ayer, Jan. 28, 1898.

decline in the importation of black plates shows the ability of manufacturers to furnish these for tinning purposes. In 1893 over half the black plates from which tin and terne plates are made were furnished by foreign mills. This ratio has so far declined that in 1897 almost none of the American tin-plate was made from imported plates.

2. The decline in the imports of tin and terne plates has been as rapid and as marked as the increase in the production. The people of the United States consume between six and seven hundred million pounds of tin and terne plates each year. At times the importations for a single year have gone above this mark. The fear of tariff legislation and the intention of avoiding any increase in the duty were the causes of such heavy shipments. Two years are particularly noticeable in this particular, 1890 and 1891.

¹ Senate Ex. Doc., 52 C., 2 S., Vol. 6, No. 102.

IMPORTS OF TIN AND TERNE PLATES.										Pounds.
Year.										
1890,	.	.	.	.	.	.	.	.	.	737,935,079
1891,	.	.	.	.	.	.	.	.	.	734,425,267
1892,	.	.	.	.	.	.	.	.	.	600,819,566
1893,	.	.	.	.	.	.	.	.	.	628,425,902
1894,	.	.	.	.	.	.	.	.	.	454,160,826
1895,	.	.	.	.	.	.	.	.	.	508,038,938
1896,	.	.	.	.	.	.	.	.	.	385,138,983
1897,	.	.	.	.	.	.	.	.	.	230,073,683

—U. S. Custom House Reports.

Of the six hundred and seventy-seven million pounds consumed in the United States in 1897 nearly two-thirds were manufactured within its borders. When this statement is compared with the fact that no tin and terne plates were made in this country in 1890 the growth of the industry seems almost marvelous.

3. March, 1898, saw forty-one plants operating 235 mills engaged in the industry.¹ The capital invested is variously estimated from three to five million of dollars. The number of persons employed has been placed as high as fifty thousand. The Congressional estimate at the time of the Wilson Bill was twenty-four thousand, but this is also too large.² It is not likely that over eighteen thousand persons are connected with the industry. But even this number is large when the short existence of the industry is taken into consideration.

4. During the last two years the price of Bessemer tin-plates IC 14 x 20, 100 pound box, has been from \$3.60 to \$3.85 at New York.³ In the period from 1880-1890 the price for the same kind of tin varied from \$5.37½ to \$7.00.⁴ During the same period the price at Liverpool ranged from 15s. 6d. to 34s.⁵ The price in 1890 was much less than this last quotation. On the basis of our money the English price was \$3.71 to \$9.16. During the last eight years the price of tin-plate in this country has steadily declined. The tariff is \$1.62 per box of 108 lbs., and in consequence English plates are now delivered in New

¹ *Tin and Terne*, March 24, 1898.

² House Report, 52 C., 2 S., Vol. 3, No. 2583.

³ *Monthly Summary of Commerce of the U. S.*, Feb., 1898, p. 1215.

⁴ Senate Ex. Doc., Vol. 6, 52 C., 1 S., No. 102, p. 38.

⁵ *Ibid.*

York at just this sum below the prices ruling in the United States. Although it is now possible to buy English plates at this very low rate, it is not at all certain that such would have been the case if the present industry had not come into existence. Comparison with prices previous to 1890 fully warrants this statement. Two dollars and thirty-seven cents are about the minimum price for plates delivered at Liverpool. The ocean freight will average 13 cents per one hundred pounds. Add to these items the tariff charge of one dollar and sixty-two cents and the price of English plates reaches \$4.12 for the American consumer. Mr. Cronmeyer, the president of the American Tin Plate Association, stated before the House Committee of Ways and Means that three dollars and forty-five cents left a moderate profit for first class tin-plates.¹ On this basis the American consumer pays ninety-five cents more per box than he would for the English plate provided no tariff existed. At the same time it is true that the price of English plates would be higher than \$3.75 per box if this industry had not come into existence.

The *Tin and Terne*,² commenting on the condition of the market, says, "The market has continued very unsettled and unsatisfactory to both buyer and seller alike. War and rumors of war, trusts and rumors of trusts, all have a disturbing influence, and in no branch of metal industry have prices been as unsettled and as confusing as in tin-plates. There is a wide range between the high seller and the low seller on spot goods to-day, and a wide difference of opinion in regard to the future market. The Indiana mills are fairly well sold up, and are rather firm in their views; while the Pittsburg mills, it is reported, are seeking business for delivery after July at prices lower than anything hitherto made. It is reported that some very large sales—100,000 boxes—have been closed in the last few days at a basis below \$2.70 per box."

The statement given above is a forecast of the future condition of the industry. The truth of the matter is that already there are more than enough mills to supply the market. Just how far the demoralization may extend is difficult to say, but it

¹ *Eng. Foreign Office Report*, Mis. No. 426, p. 9.

² March 24, 1898.

is more than likely that American plate will fall below the three dollar line. If this happens, we may look for repeated attempts to organize trusts and to close down some of the weaker plants. A period of readjustment will follow, and higher prices again prevail.

5. The establishment of the industry has had a marked effect upon foreign makers of tin-plate. This is well illustrated by the report of the American consul at Cardiff in which the following is given:¹ "The tin-plate trade of South Wales has persistently gone from bad to worse during the last few months." In a manifesto appearing in the *Industrial World*, the official organ of the Tin-plate Worker's Union, are several interesting statements that corroborate the opinion of the American consul. The one now given sets forth the condition of the tin-plate business in a dismal picture. "At the beginning of the week 144 out of our 512 mills were idle. This can be contrasted with the state of affairs before the McKinley tariff came into operation. In January, 1889, there existed 482 mills, 17 of which were idle. * * * * The Welsh mills, with the comparatively few mills on the continent of Europe, are capable of fully meeting the requirements of the world for plates; that being so, every box of plates made in America means a box less in Wales."² Many other statements of like character have appeared in the various English newspapers. The writers are perfectly aware of the decline of the English industry and are fearful that the American market will be forever lost to them.³ Mr. John H. Rogers, a large manufacturer of tin-plate in England, and resident of the Tin-plate Makers' Association, in a letter to the Tin-plate Makers' Union, predicts that many of the men will lose their positions and that the coating part of the business will leave the country.⁴ Preparations have already been made by some of the plants to change their business into that of galvanizing. All these facts point to a demoralization of the Welsh trade due evidently to a falling off in the American demand.

¹ Consular Reports, May, 1896, p. 67.

² Ibid, p. 68.

³ Consular Report, Nov., 1897, p. 323.

⁴ Consular Reports, May, 1898.

6. One final question remains for our consideration: What is the probability of the continued existence of the industry? The elements of success in the trade are the tariff, the cheapened production of steel, and the low price of labor. These three things have made it possible for the industry to gain a foothold in this country. The tariff seems to have given the incentive and at the same time to have protected the business from excessive competition in the beginning. The fact, as shown by previous tariffs, that such protection alone was unable to create the industry, gives additional importance to the other elements. If steel had not been low in price at the time wages were falling, it is doubtful whether the McKinley act would have created the industry. In regard to the future, the indications are that steel will continue low in price for some time to come. The exports of steel made in the last two years certainly point to a decided advantage in this material over the English industry. So long as the progress in mining machinery and rolling mills continues, we may expect to retain this advantage. Wages, however, are certain to rise, and it is more than likely that two years will see them restored to the old level. Unless this advance can be offset by improved machinery, which is more than probable, there must be a slight rise in the price of tin-plate and with it some encouragement to foreign makers to enter our markets.

About the only market now left to the English makers is that of the Pacific coast. The freight rate on one hundred pounds from Wales to San Francisco is 18 cents; the rate from Pittsburg to the same city is $61\frac{1}{4}$ cents.¹ The price of English plates, duty paid, at the latter port would be \$4.17. If the price for American plates is \$3.45, then two makes are about the

		Per 100 lbs.
¹ South Wales to Atlantic ports,	. . . . .	12c.
" " " Pacific "	. . . . .	18c.
" " " Gulf "	. . . . .	15c.
Pittsburg " Atlantic coast,	. . . . .	15c.
" " Pacific "	. . . . .	$61\frac{1}{4}$ c.
Indiana " Gulf "	. . . . .	20c.
New York " Chicago,	. . . . .	20c.

—From *Eng. For. Reports*, Mis., No. 426, p. 13.

same, \$4.17 and \$4.16 per boxes of 108 lbs. delivered. Even this market is likely to be closed to England if the price falls below \$3.45 per box.

The American tin-plate industry will undoubtedly continue in existence. At the present, combinations and trusts threaten to control the industry. A short-sighted policy on the part of the managers may lead to higher prices and renewed competition with English makers. Such an organization is more likely to cut expenses and hold the price just below the point of foreign competition, so that the danger from foreign rivalry is not great. The industry is not so dependent upon the tariff as might be supposed, and the actual possession of the market, accompanied by good product and sensible management, will make it possible to meet the foreign competition as the tariff is lowered.

The American consumer now pays about ninety-five cents more for American tin than the price of English plate delivered at New York. This is really a premium for the maintenance of the American industry. If in the course of ten or fifteen years our manufacturers can meet the English price, the cost, expense and trouble in creating the industry have been justified. As it now stands three things may endanger the industry, (1) rise in cost of steel, (2) in wages, (3) and in block tin. If this rise should occur in the three cases at the same time the industry would hardly stand under the blow. As has already been pointed out, steel is not likely to increase in price, while the output of the Banca mines will protect us in some degree from any change in the price of Welsh block tin. At the same time American ingenuity will undoubtedly increase the efficiency of labor so that the disadvantages now labored under may gradually disappear. Taken all in all, the development of this industry is a remarkable example of timely legislation. The conditions were present, the tariff permitted their utilization, but in no sense must the importance of the conditions be underestimated.

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RAILWAY RECEIVERSHIPS IN THE UNITED STATES.

THEIR ORIGIN AND DEVELOPMENT.

IN the words of a member of the Supreme Court of Georgia, "this is the day of receiverships, and their dominion seems to be extending all over the land." A receiver, according to Beach, is an officer of the Court of Chancery appointed to take charge of property in litigation, when it does not seem equitable to the court that either party should have possession or control of it. "Railway receiverships, as incidental to a foreclosure of the mortgages upon railway property and franchises, are, in the main, peculiar to the system of jurisprudence administered in the United States."¹ Both the law and the practice of receiverships in railroads are a distinctly American product of practically the past thirty years.

The purpose here is to inquire into the extent, the procedure, the causes and the results of this form of administration of corporate property only so far as it relates to railroads in the United States.

The latest official figures available as to the extent of railway insolvency in the United States show that on June 30, 1896, there were 151 railroads in the hands of receivers.² These figures represent a mileage of over thirty thousand (30,475.39) or over 16 per cent. of the total mileage of this country at that date. The capitalization represented \$742,597,698 in stocks and \$999,733,766 in bonds. For the year ending June 30, 1895, there were 37,855.80 miles in receiver's hands, or about 21 per cent. of the mileage of 1895. This shows a slow recovery from the panic of 1893, when one dollar out of every four invested in railway securities was in the hands of receivers, and being administered by the State and Federal courts through whose authority the receiverships had been granted.³ That is

¹ Beach, *On Receivers*, p. v.

² *Statistics of Railways in the United States*, pp. 9-10, 1896.

³ *Income Account of Railways in the United States*, p. 12, 1894.

to say, that in most memorable years of the collapse of railway credit there passed out of the control of its owners private property in railway corporations to an amount that fell very little short of the total assessed valuation of all the real and personal property in the five New England States according to the census of 1890.¹

The following table covers a period of thirteen and a half years of receiverships, giving the number of roads involved, the mileage and the amount of stocks and bonds from 1884 to July 1, 1897.²

The figures for receiverships are not directly available for the years prior to 1884. We know, however, that in the years 1876-1883, there were sold at foreclosure sales, most of which roads must have passed through some form of receivership, as many as 291 roads, with a mileage aggregating 25,143 and having a capital in the form of bonds and stocks to the amount of \$1,576,062,000.³ The yearly average for this period would therefore be 38 roads, of 3143 miles, and nearly \$200,000,000 of capitalization. For each one of those foreclosures, says Beach, there were from one to ten receiverships.⁴

¹ *World Almanac*, 1897, p. 138.

² *Railway Age*, Dec. 15, 1893, p. 888.

	Roads.	Mileage.	Stocks and Bonds.
1884	37	11,038	\$714,755,000
1885	44	8,384	385,460,000
1886	13	1,799	70,346,000
1887	9	1,046	90,318,000
1888	22	3,270	186,814,000
1889	22	3,803	99,664,000
1890	26	2,963	105,007,000
1891	26	2,159	84,479,000
1892	36	10,508	357,692,000
1893	74	29,340	1,781,046,000
1894	38	7,025	395,791,000
1895	31	4,089	369,075,000
1896	34	5,441	275,597,000
1897 (July 1)	19	1,314	151,651,000
Total	431	92,179	\$5,067,695,000

³ *Railway Age*, January 7, 1887, p. 2.

⁴ Beach, *On Receivers*, Preface, First Edition.

From 1884 to 1896 inclusive, the number of roads put into receivers' hands has been carefully recorded and can be compared with the records we have of the roads which in the previous period passed out of receivership control. If we leave out the last six months of the above table, we have a total of 412 roads for these thirteen years, a mileage of 90,865, and securities amounting to \$4,916,000,000. For each of these years an average of 31 roads failed; the mileage involved each year was nearly 7,000—a distance equal to the entire Pennsylvania system, or twice the distance from New York to San Francisco and return and back to Pittsburgh again, or 200 miles less than eight times the distance from New York to Chicago, were put into receivers' hands every year; on an average for these years, the annual liabilities in stocks and bonds that were concerned with this flood of insolvency exceeded \$378,000,000. The grand total of liabilities in business failures for the entire United States in 1896 was \$247,052,343. The magnitude of the railway interests of the country does not suffer by comparison with other fields of economic enterprise.¹

There is still another more remote period of railway insolvency, comprising the years of 1871-4, when railroads together with every other commercial enterprise went through the paroxysms of contraction in the effort of the country to readjust its business to the conditions of peace. It is difficult to determine just how many roads were put into receivers' hands during this period, but it is possible to indicate the extent of defalcation that overtook the rapidly expanding development, from a study of the financial records for these years. Those were the days when railroad securities were floated with a freedom that defies accuracy in statistical inquiry. We have therefore to wait for the courts and the stock exchange to deliver up those magical instruments with which the country in its unbounded faith in its possibilities of immediate development managed to double its railway mileage in the short span of eight years. A conservative estimate from figures given in the financial journals of the period leaves little reason for doubting

¹ *World Almanac* (1898), p. 151, from *Bradstreet*.

that there were over a hundred railroads on whose bonds interest had ceased to be paid as a result of conditions prevailing in their construction and management.¹ These conditions were cumulative prior to 1873 and entailed upon the next few years a burden of reorganization for which the railway experience of the country was not by any means prepared. We had not yet learned how to handle so large a volume of property of this kind under the circumstances peculiar to the times.

The panic of 1873 proved this. The railway receivership as we know it now was not well developed as a method of administration. The characteristic of this particular crisis was that it was preëminently a railroad panic. It broke out in the fall of 1873, unannounced as it would seem to the business mind of the country in general. But it was not really so. Thirty-four roads had failed to meet interest charges on their bonds several months before the panic came. These bonds amounted to \$144,807,000, or 30 per cent. of the total of amount involved in the panic period. During the first eleven months of 1873, 56 roads had defaulted in payment of interest on \$137,957,000 of their bonds. This equalled over 10 per cent. (7,544 miles) of the total mileage of the entire country at that time (72,000). By November 15 the *Commercial and Financial Chronicle*² figured that the sum total of railroad bonds on which interest was then due and unpaid reached the aggregate of \$217,959,311. The whole amount of railway bonds then outstanding in this country was nothing short of \$1,700,000,000, so that 13 per cent. of the whole bonded debt of railroads in the United States was in default. But the course of this crisis had not yet run its full length. During the month of January, 1874, 25 additional roads defaulted for the first time on \$110,261,792 of bonds alone, to say nothing of stocks which up to that time had a fair standing as interest-bearers, in a large proportion of the older roads. Of these latest bonds \$49,766,000 were land grant bonds, indicating where one weakness of the railway policy lay. Of the 3,861 miles represented in this month's record of failures the Atchison, the Atlantic and Pacific and the Northern Pacific roads included more than one-third of the

¹ *Commercial and Financial Chronicle*.

² Vol. xvii, p. 647.

mileage and 43 per cent. of the bonds, among which were the tempting 7-30's of the Northern Pacific to the extent of thirty millions. Over half of this mileage and 58 per cent. of the bonds lay beyond the Mississippi River. The Southern territory furnished but 15 per cent. of mileage and 14 per cent. of defaulting bonds. By this time the total number of roads in default had reached 89, with bonds amounting to \$386,403,668. In October, 108 companies had passed interest on bonds and were in process of financial adjustment by settlement between management and bondholders or by foreclosure. This brings the bonds in default up to the amount of \$497,807,660, on which the ruling rate of interest was seven and eight per cent.¹ If we take the railroad debt at the time (October, 1874) as being \$1,950,000,000, it appears that 25 per cent. of the bonded debt of railroads was in default.

An analysis of these totals reveals the form which investments took, as shown in the proportion of bonds whose principal and interest were made payable in gold. It further shows the extent to which foreign investors were interested in our railroads as investments, and likewise indicates the areas of insolvency for the entire country. Of the total bonds in default in 108 companies (\$498,000,000) the territorial distribution was as follows:

New England and Middle States,	\$ 78,000,000
Southern States, east of the Mississippi,	78,000,000
Central States, east of the Mississippi,	99,000,000
States west of the Mississippi,	216,000,000
Canadian, and American not specified,	27,000,000

The gold and silver question did not enter very deeply into the question of payment of principal, but the question of gold or greenbacks was a prominent factor in the railway financiering of that period. Out of the total bonds in default we find that there were

First Mortgage Gold Bonds,	\$81,000,000
Second Mortgage Gold Bonds,	14,332,000
Total with principal and interest payable in gold,	95,332,000

¹ *Commercial and Financial Chronicle*, Oct. 10, 1874, p. 363.

It is safe to say that at this time when the financial policy of the Federal government had possibly no less of the elements of instability than it has had during the last five years, there was no less than 19 per cent. of the principal and interest of the railroad bonds in default payable in gold. This feature of mortgage obligations was not peculiar to any one portion of the country; it appears in bonds on eastern, western and southern railroads. The temper of the investing class was very much less suspicious in the seventies than in the nineties, when it was practicably impossible to float railway bonds as first mortgages without the gold clause included, as part of the contract. In the seventies it was interest rather than principal that was covered by the gold clause.

One hundred and fifty millions or 15 per cent. of the American railway bonds in default at the end of this, the first great crisis, in this class of securities were held in foreign countries, largely in Germany, Holland and England. This was about 40 per cent. of the entire amount of foreign holdings of American railway securities. Foreign investors were particularly favorable to land grant bonds, of which the railroad companies seem to have issued a quantity somewhat proportionate to the demand. Among the bonds in default at this time, \$75,476,000 were land grant bonds. There is no doubt but that the requirements of construction in order to secure the land grants led not only to building beyond the needs and the wisdom of the times in the western States especially; but this very necessity of pushing construction in order to save the land grants from lapsing, required the promoters to pledge whatever had a cash-commanding capacity regardless of the limited earning capacity of the properties for some years to come.

The value and the necessity of the receiverships as a method of satisfying the complex requirements of railway property in default began to be apparent during this series of years. Yet it was hardly more than a beginning, in which there had been demonstrated to the public and to the investor alike that something superior to the trusteeship was required to meet the equities involved. The receivership, like the traffic association, seems to have gotten its first development in the South, where

the legal doctrine of receiverships received its earliest formulation.¹ At this time receivership certificates, which have since become so prominent a feature of railway insolvency, were coming into use; the largest issue authorized was one of \$1,200,000 for the Alabama and Chattanooga Railroad, and another in 1873 of \$700,000 for the Selma, Rome and Dalton Railroad in Alabama. The great variety of securities, which later regard for the specific needs of the investor has developed, had not yet begun to appear. Besides the first and second mortgage bonds, interest scrip served as a short-time certificate of indebtedness, used in funding coupons to the extent of \$1,718,000—arrears in interest funded and again in default. There was practically no third mortgage bond as yet except as an equipment bond, of which in the defaulting securities, amounting to nearly five hundred millions, there was but a single million as compared with nearly six millions of income bonds. The latter were really mortgages on the net earnings. Not even these newly devised forms of obligation could prevent an astute management from diverting an honestly earned surplus to the construction of an extension in which it might be interested, to equipment or improvements or to the payment of all-absorbing salaries to the managing officials.

Evidently there was need of some more authoritative control. Adverse legislation and popular antagonism of the railroads from 1870 to 1875 had their source in the widespread conviction that railway management was thoroughly dishonest with the public and far from fair in its dealings with the investor. It must be remembered, however, that the railroad was a creature of the times; it was called into existence by the needs of the communities which it sought to serve. To satisfy this demand and to keep the property in safe and efficient condition it became necessary to assume a great variety of obligations of such a character as to imperil the credit of the corporation. If hostile legislation, shrinkage in securities used as collateral to borrow money, and rate wars almost every summer came together, as they did in this period, there was no other way than bankruptcy open before this set of causes, especially for the weaker lines then in competition for trunk-line traffic.

¹ *Meyer vs. Johnston*, 53 *Alabama*, 264-286, 1873.

In those failures which took place before 1876, re-organization or settlement with mortgagees was speedily effected as a rule. The trouble was, in this case, that it was done altogether too speedily to be permanently done. Default in interest on bonds being the immediate cause of embarrassment, a settlement with bondholders gave the management a free hand to carry on the same or similar policy as before, without anyone's having taken the trouble to go to the root of the matter and get a thorough understanding of the situation. It was often impossible to do so for want of access to information. Managers often avoided or failed to give out detailed reports of the condition of the property in their control. A settlement was patched up which could hardly last, because it was based on a thoroughly false conception of the railroad as an institution in its relation to social interests. The railroad had not yet come to be regarded in its twofold aspect, both as a social institution required for the community and as a financial corporation bound to discharge its obligations to the investor. The role which it was still playing, in many parts of the country, was that of an exploiter of the community and creditor alike for the benefit of an inside clique which could not or would not be made responsible to the stockholders in whom the title to the property lay. The stockholders themselves had frequently exhausted their resources in building and had little credit or cash left to tide the property over a year of deficit in income. Thus the management and the bondholder came to control the situation, in which the two other interests of the stockholder who had reached his limit and the community were in danger of being lost sight of.

Under these conditions the railroads which failed in the early seventies were not really re-organized—they were simply regvanized. Many of the mortgages could not be foreclosed at all, because the State had endorsed the bonds and had the right of foreclosure, which it did not exercise because it did not want the road or did not want to sacrifice the property by a forced sale in the midst of financial depression. The State could not be sued on its endorsement. This was the case with the Montgomery and Eufala bonds in Alabama. In the case

of the Boston, Hartford and Erie—the leading failure in New England—the bondholders could not sell the property mortgaged to them under any circumstances. They could take possession and run it “forever” if necessary to do so in order to make good the interest in default, but that being done the road must be restored to those by whom the interest should have been paid promptly. If, again, a hundred millions of bonds were offered in the market authorizing fifty per cent. of the bondholders to foreclose the mortgage in case of default in interest, and only forty-five millions were actually sold, there was no foreclosure possible as a mode of recovery for the bondholders who had bought on the assumption of a sale of the whole issue.

→ Evidently the rights of bondholders were frequently no rights at all except that of waiting and working to bring about a better state of things. A settlement was most frequently made by funding the overdue coupons into certificates of indebtedness, income bonds, or more bonds payable several years hence. But this increased the fixed charges, which was just what the future of these embarrassed roads could not stand. Thereby they made it still more difficult to borrow money except on increasingly hard terms, if they were fortunate enough to get any at all.

The receivership was as yet not sufficiently differentiated from the trusteeship—an arrangement devised to protect the interest of the persons from whom the railroad borrows money. In a majority of cases when a railroad proposed to borrow to help it out of financial trouble, it had to select a responsible person well known in the financial world with whom the mortgage deed was to be deposited in trust. Upon certain conditions the bondholders could authorize or require him to proceed to foreclose the mortgage. But where the trustee was an officer of the road whose interests therein led him to oppose the interests of the bondholders, the trusteeship simply amounted to another mode of withstanding the investor in the exercise of his rights of foreclosure. In one New York road the president and two directors were trustees of the first and second mortgages. The president of the largest railroad in Pennsylvania was the trustee of so many mortgages that it

became a physical impossibility for him to affix his signature to the bonds and so had to have it lithographed on them.¹ The trusteeship was, therefore, so constituted as to include conflicting interests between management and investor. It enabled the management to perpetuate the one-man power, which was either the making or the breaking of the system; but it did this frequently at the expense of the bondholder for whose protection it was primarily intended. It only brought the investor or lender deeper into the mire. In Connecticut, the State Treasurer was trustee, upon whom the bondholders might impose the duty of taking charge of the road and operating it till all arrears in interest were made good, then turning it over to the owners. If the State Treasurer had anything like a proper fear of a deficit before his eyes, or if the bondholders had any such misgiving under the Treasurer's management, this trusteeship could have given them but little comfort.

In many of the mortgage deeds it was not obligatory, but simply optional, on the part of the trustee as to whether he should proceed with foreclosure upon expiration of the period required after default. It was optional with him likewise as to whether he should take possession of the road in the interest of the bondholders. Sometimes three years had to elapse before the trustee could proceed, even when his duty was mandatory. Three years of default in the hands of a management thus placed beyond control of bondholders or stockholders was ample to ruin the property by making the utmost out of their opportunity. Even when a road was taken out of the hands of the owners and put into the control of trustees of the mortgage deed, the mortgagees had to indemnify the trustees against any deficit or loss that their management might incur. This meant that the bondholders had to be assessed to cover the expenses of operation while the arrears in interest were being recovered, or while the foreclosure proceedings were being made. It was sending good money after bad money, as the saying goes. The trusteeship, whether it was vested in a person or persons or in a trust company, failed largely because its duties were not sufficiently defined to protect the lender,

¹ *Commercial and Financial Chronicle*, Feb. 7, 1874, p. 131.

and because it was being constantly used to enable the borrower to evade his responsibilities. It served a useful purpose in caring for sinking funds as they might be turned over by the railroad managers to the credit of the investor whose funds had been advanced; but the method of control by trustees was not adequate to see that the earnings of a road in default were not dissipated in other directions, even when they were sufficient to meet the interest charges. The need of supervisory control was being felt when roads passed interest apparently at their own convenience, though they were fully able to meet the interest out of earnings. Such was the case in the default of the three millions of gold bonds, at seven per cent., by the Chicago, Danville and Vincennes, in October, 1874. The bondholders at once requested that they might have a representative to watch over their interests without implying any dereliction or desiring to act other than harmoniously with the directors in charge of the road.

Out of these contributory conditions the judicial receivership arose. The history of railway relations shows that the railroad first eliminated the community from its management when it disengaged itself from the control of the State executive and legislature, and entered the field of transportation as a commercial corporation free to follow its own policy. Secondly, it practically ruled out the stockholder as a factor in its policy. Thirdly, it succeeded in setting at naught the bondholder, when he sought to recover his claims as a mortgagee of insolvent property. None of these had succeeded in holding a bankrupt railroad to its obligations in a satisfactory manner to the public, the owners and the creditors. Under the circumstances, the courts of equity were the most natural resort of all interests involved. In fact, the relation of railway corporations to the courts is by far the most intimate and direct governmental relation the American railroads have had in the course of their development.

The rise of receiverships is, therefore, connected with the following state of things in the railway situation during the ten years immediately following the Civil War: (1) The increase in conflicting equities in property and franchises inci-

dent upon growth, extension and consolidation of a great variety of properties, occupying very different legal positions in different States; (2) The inability of managers or of trustees to command working capital to operate roads in times of insolvency and pending reorganization or settlement. (3) Distrust of management by stockholders, bondholders, and by the public as evinced in hostile legislation. (4) The necessity of protecting from distintegration the owned and leased properties, operated as a system, and of giving longer time for interested parties to determine upon the wisest plan of reorganization. Foreign investors who had been among America's best customers for railway securities, could not act speedily in case of default. It was beginning to be recognized that the receivership was the only safe resort for a railway corporation which had ceased to be responsible for its obligations to the public, the proprietor and the capitalist who provided it with working capital. Once in the hands of the court, and under receiver's control, the scattered interests of investors could be brought together, the property could be conserved and operated without more than necessary prejudice to any interests involved, and most important of all—the whole enterprise could once more be put upon a responsible basis. The rise of receiverships in railroads in the United States is the history of *the evolution of responsible management in an entirely new species of corporate enterprise, involving a unique complex of interests individual and social*. We shall see as we study this form of judicial control of corporate property that the receivership has been a necessary stage in the elaboration of that policy of railway administration in which the well-defined *rights of the investor* and the more general, yet no less necessary, *duties of the railroads to the community* find their *equilibrium*.¹

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¹ Greene, *Corporation Finance*, pp. 164-166.

NOTES.

British Legislation in the Session of 1898. Ireland and ecclesiastical questions affecting England chiefly monopolized the session of 1898 of the British Parliament. The Acts affecting the Church of England and the Nonconforming churches in England were comparatively small matters so far as the time of Parliament was concerned. The session was devoted to the Irish Local Government Act, and it will go into Parliamentary history as a one-Act session like the sessions of 1888 and 1894, when the Acts reforming county and parish government in England were passed.

In a general survey of the session of this character, it is not possible to go into any full explanation of the Local Government Act for Ireland. It is an Act of nearly one hundred and twenty pages; and it embodies, as is necessary, an enormous amount of detail. It sweeps away the old system of county administration by Grand Juries, and establishes a system of local government in the counties, in the county boroughs, and in the rural areas, as democratic as the systems which have existed in England and Scotland since the era of county and parish government reform which was begun by the English County Government Act of 1888. The Act, in brief, as nearly as can be, duplicates the local government machinery of England, and sets it up in Ireland. It removes an Irish grievance; and excepting Home Rule, the last of the demands for constitutional reform for Ireland has now been granted. It marks the end of an agitation for equality of treatment with Great Britain, which began about 1766, when an Octennial Act replaced the old system under which Irish Parliaments were elected for the lifetime of the sovereign, an agitation which took on new vigour and a much more wide-spread character at the time of the American Revolution, and in the last 120 years has led to what is almost a re-making of Ireland, so far as its Governmental Institutions are concerned. For the Unionist Government, the new Act is a fulfillment of a pledge in respect to Ireland which dates back to 1886. During the next few years, interest will center in the way in which the Irish people will work the Act, and the effect it will have on the agitation for Home Rule both in Ireland and in England. In England it can hardly fail to put the question of Home Rule still further in the background.

The ecclesiastical legislation for England was not epoch-making, like the Irish Local Government Act. It is none the less distinctly interesting, and directly concerns both the Church of England and the Nonconformists.

For the Nonconformists an Act was passed rendering unnecessary the attendance at marriages in Nonconformist churches of the civil registrar of births, marriages and deaths. The registrar has been in attendance at such marriages even since 1836, when Lord John Russell's Registration Act was passed. At marriages in churches of the Establishment, the attendance of the registrar has never been necessary. The law has regarded the rector or vicar of a parish, and even an unbeneficed curate in the service of the incumbent, as an officer of the State, and has entrusted these clergymen with the civil duty of registering marriages, and forwarding the duplicates to the Registrar-General at Somerset House, London. At Nonconforming churches the local registrar has hitherto attended to perform these duties; and for a long time this statutory differentiation between clergymen of the Established Church and Nonconformist ministers has been a grievance with Nonconformists. It has been a real and practical grievance. Oftentimes it has caused delay and inconvenience, and has undoubtedly led to many marriages being celebrated in churches of the Establishment which would otherwise have been performed in Nonconforming places of worship. Moreover it has added to the cost of Nonconforming marriages, as the fee of the local registrar had to be paid, while at church marriages there was no corresponding fee. It placed Nonconformists at a social disadvantage, and for nearly fifty years they have agitated for equality with the Church of England in regard to the marriage laws. This equality has now been established. All duly accredited pastors of churches, registered under the Act of 1836, can now perform the marriage ceremony without the attendance of the local representative of Somerset House; while at the same time, precautions are taken to safeguard the present excellent system of publicity and registration. To some extent, the Marriages Act of 1898 is to the Nonconformists of England what the Local Government Act is to the people of Ireland. It removes nearly the last of the statutory grievances of Nonconformists, who, except as concerns elementary education and the great question of the Disestablishment and Disendowment of the Church of England, have now no grievance which Parliament can remedy. One fact in connection with the Marriages Act of

1898 remains to be noted. The Nonconformists have long been the backbone of the Liberal party in England. Yet this last measure of relief comes from what is in some respects the most Tory Government of the nineteenth century. It was to a Conservative Government, it may be remembered, that the Nonconformists owed the Act which completely threw open the older Universities to students who could not take the Church of England test, a test which previously shut out Nonconformists from the full opportunities and advantages of Oxford and Cambridge.

The Benefices Act, the measure which directly concerns the Church of England, is intended to restrict the sale of church livings, and to give parishioners opportunity to prevent unworthy clergymen being saddled upon them. The rights of next presentation hitherto have frequently been sold at auction like any other description of property. The new Act makes it unlawful to offer for sale at auction any right of patronage except in the case of an advowson to be sold in conjunction with a manor or with an estate in land of not less than one hundred acres. In such instances, that is when advowsons do not go with manors, the land must be in the same parish as the benefice or in an adjoining parish, and must belong to the same owner as the advowson. Any person who offers any right of patronage for sale at auction in contravention of the Act, or bids at such a sale, is made liable on summary conviction to a fine not exceeding £100. Power is also given to bishops to refuse to institute or admit a presentee to a benefice on the ground that at the date of presentation not more than three years have elapsed since the presentee was ordained deacon, or that the presentee is unfit for the discharge of the duties of the benefice by reason of physical or mental infirmity or incapacity; pecuniary embarrassment of a serious character; grave misconduct or neglect of duty in an ecclesiastical office; evil life, having by his conduct caused grave scandal concerning his moral character since his ordination; or having with reference to the presentation been knowingly party or privy to any transaction or agreement which is invalid under the Act. In order that parishioners may have time to learn the antecedents of the new incumbent, the bishop must give a month's notice of the proposed institution. In cases where the bishops refuse to institute, the person presenting and the presentee have the right to carry the case to a court, which is to consist of the Archbishop of the Province, and of a judge of the Supreme Court nominated by the Lord Chancellor. In this court

the rules of legal evidence are to hold good, and the court is to have the same powers of administering oaths, and of requiring the attendance of witnesses and the production by them of documents, and as to the payment and recovery of costs and expenses, as are exercised by the High Court of Justice. When the bill was before the House of Commons, an effort was made to give parishioners a right to object in respect to matters of doctrine and ritual. The Government, however, refused to open so wide a door to contention; and the Act specifically excepts doctrine or ritual from the causes for which a bishop may refuse to institute a presentee to a benefice.

Among the Acts of a more general character were the Vaccination Act, the Elementary School Teachers Superannuation Act, the Inebriates Act, the Criminal Evidence Act, the Prison Act, and a short Act amending the Vagrancy Laws.

The Vaccination Act makes important changes in the law as to compulsory vaccination, as it has stood since 1867—changes which were made in deference to public opinion, and in consequence of the report of the Royal Commission which had examined exhaustively into the working of the Acts passed since 1867. Under the Act of 1867, and two later Acts, parents of children were compelled to have them vaccinated within three months after birth. Under the amending Act of 1898, the time is extended to six months. Under the old laws, parents whose children were vaccinated at the public expense were required to take children to the public vaccinator. Under the new Act, parents can call upon the public vaccinator to visit them in their homes for the purpose of vaccinating children. If a child is not vaccinated within four months after its birth, the law now directs that the public vaccinator shall “visit the home of the child and shall offer to vaccinate the child with glycerinated calf lymph, or such other lymph as may be issued by the Local Government Board.” The regulations of many of the maternity homes provide that children born in them shall be vaccinated before the mothers leave. The new Act makes all such regulations illegal, and provides that “the parent of any child born in any institution shall not be compelled under such regulations or otherwise to cause or permit the child to be vaccinated at any time earlier than the expiration of six months from its birth. The most important clause is that which provides for exemption from penalties. The administration of the Compulsory Vaccination Laws is in the hands of the local boards of guardians

for the relief of the poor. Hitherto when the parent failed or refused to have his child vaccinated, it was the statutory duty of the board to prosecute in the local police court. By the new Act it is provided that no parent shall be liable to any penalty, if, within four months from the birth of a child, he satisfies two justices or a stipendiary or metropolitan police magistrate in petty sessions that he conscientiously believes that vaccination would be prejudicial to the health of the child, and within seven days thereafter delivers to the vaccination officer a certificate by such justices or such magistrate of such conscientious objection. This clause, while affording a large but not an absolutely certain measure of relief to anti-vaccinators, is supplemented by three other clauses which have the same end in view. Two of them sweep away the repeated penalties of the Act of 1867, and the third provides that persons committed to prison for non-compliance with the Vaccination Acts shall be treated as first-class misdemeanants. Formerly such offenders were treated like persons convicted of drunkenness, or any other offenders fined in courts of summary jurisdiction. With a view to the systematic compilation of statistics as to the effects of vaccination, there is a clause in the Act which provides that clerks to all municipalities which maintain hospitals for the treatment of smallpox patients, shall keep lists of the names, addresses, age and condition as to vaccination of all smallpox patients treated in such hospitals.

A system of pensions and of allowances during incapacity is established by the Elementary School Teachers Superannuation Act. The Act is applicable to all schools under the control and supervision of the Education Department, whether the schools are under the local management of popularly elected school boards, or of school committees chosen by the churches which conduct elementary day schools. The pension fund is maintained by the compulsory contributions of the school teachers themselves. The money necessary to meet allowances to teachers who are incapacitated for work is to be voted each year by Parliament. Every school teacher in England must possess a certificate of efficiency recognized by the Education Department. Up to the time of the Superannuation Act there was no age limit to these certificates. Under the Act they are to expire when the school teacher reaches the age of 65; and in future all teachers receiving certificates are to be subject to a physical examination, and to an agreement to contribute to the pension fund during the years of recorded service—

that is, during the time they are at work in schools maintained out of public funds, and visited by the inspectors of the Education Department. Men teachers are to pay £3 a year; women £2 a year. When a school teacher is retired at the age of 65, he is to receive an annual superannuation allowance, calculated at the rate of ten shillings for each complete year of recorded service. When a teacher becomes "permanently incapable, owing to infirmity of mind or body, of being an efficient teacher in a public elementary school, he is to receive an annual disablement allowance at the rate of "£20 for ten complete years of recorded service, with an addition of £1 for each complete additional year." This is the rate for men. For women, the rate is £15 for ten years of service, with 13s. 4d. for each additional year. The system is compulsory as concerns teachers entering the service. Teachers already in possession of certificates may choose whether or not they will come within the provisions of the Act. The pension system thus established is largely the outcome of agitation on the part of the Elementary Teachers Union, which has long demanded that, in respect of pensions and disablement allowances, teachers serving under the Education Department should be treated like civil servants.

The Inebriates Act amends and greatly extends legislation on the same subject passed in 1879 and in 1888. These earlier measures provided for the licensing of homes for inebriates, and gave local magistrates power to commit to these homes when patients were themselves willing to enter them. These homes were maintained by private practitioners. The new Act gives municipal and county councils the power of licensing homes, and also power to contribute to the cost of establishing and maintaining them. It also extends the time during which a patient may be detained from one to two years, and provides that if a patient escape from a retreat, the time between his escape and his return to the retreat shall not be treated as part of his term of detention. It also gives judges and magistrates power of detention over habitual drunkards guilty of crime, and over habitual drunkards repeatedly convicted of drunkenness. When a court is satisfied that a person convicted on an indictment of an offence punishable with imprisonment or penal servitude, committed the offence under the influence of drink, or that drunkenness was a contributing cause of the offence, it may in addition to, or in substitution for any other sentence, order that he be detained for a term not exceeding three years in a state inebriate reformatory. Similar power of detention is given to

courts of summary jurisdiction in the case of persons who are convicted of drunkenness four times in the course of a year. At present there are no State inebriate reformatories. Under the new Act, however, the Home Secretary is given power to build such reformatories, and also to issue licenses to any county or borough, or any person desirous of establishing such institutions.

The Act amending the law of evidence makes "every person charged with an offence, and the wife or husband, as the case may be, of a person so charged, a competent witness for the defence at every stage of the proceedings, whether the person so charged is charged solely or jointly with any other person." A person so charged is not to be called except on his own application; and if he does not apply, his failure is not to be made the subject of any comment by the prosecution. If he does volunteer for the witness box he may be asked any question in cross-examination, although his answer might tend to criminate him. The Prison Act makes a series of important changes in the direction of humanizing the prison code. It gives boards of visitors more latitude in making rules for prisoners under sentence of hard labour, and also restricts the infliction of corporal punishment for offences against prison discipline. The Vagrancy Act brings under the definition of a rogue and vagabond within the meaning of the Vagrancy Act of 1824, men who live wholly or in part on the earnings of prostitution. The Act throws on the accused the onus of proving that he is earning an honest livelihood.

EDWARD PORRITT.

Farmington, Conn.

Recent Historical Monographs. The introduction of systematic training in methods of research into our University work is justifying itself more abundantly year by year, through the marked improvement in the quality of the monographs that are published by students. There is greater energy and zeal in the collection of material, more penetration in its analysis and a more careful authentication of the results. What was once looked upon as an academic exercise is now looked at more seriously as an opportunity to contribute to existing knowledge.

That the opportunity is not always turned into achievement, and that not infrequently the young investigator takes himself too seriously and lapses into pedantry, must be acknowledged, but the steady increase in the production of sound and valuable mono-

graphs more than counterbalance these drawbacks. Two or three examples of the best recent work may be noticed in this connection. The history of American political parties has often been attempted, but what an advance from the time when Ormsby thought it worth while to write the history of the Whig Party out of his head,¹ to the production of such a work as that of Dr. Theodore C. Smith's on "The Liberty and Free Soil Parties,"² by far the most thorough and valuable study of the formative period of party history that we have. It is noteworthy not only for its extended research, but for the care with which local influences are traced out.

Another admirable piece of work is that by Miss Eleanor L. Lord, a graduate of Smith and Bryn Mawr, who has derived from the Board of Trade Papers in the English Record Office the material for several connected studies on "Industrial Experiments in the British Colonies of North America."³ The efforts of the government to draw naval stores from the colonies, the projects for promoting emigration, the various experiments in bounties, the policy in regard to forests, lumber, and manufacture, are fully set forth from material most of which is not yet printed.

Our third example is a Cambridge University prize essay on "The Monroe Doctrine," by W. F. Redway.⁴

This volume, while so excellent as to be justly described as the best work we have on the Monroe Doctrine, is less valuable than it would have been had its author not appealed to a general audience and in deference to their supposed wishes omitted all precise reference to authorities and sources. It is a good example of the application of historical method, although at times the author's critical processes are less precise than could be wished, but its distinctive feature, which gives it a positive value of its own, is the use which Mr. Reddaway has made of the material in the English Diplomatic Correspondence in 1823 and 1824. Hitherto we have had to rely on the information derived from Adams in Washington

¹ "He (i. e. the writer) has had no access to libraries, nor public documents." Preface to "A History of the Whig Party," by R. McK. Ormsby.

² *The Liberty and Free Soil Parties in the Northwest*. Toppan Prize Essay of 1896. Harvard Historical Studies, VI. New York, Longmans, Green & Co., 1897.

³ *Industrial Experiments in the British Colonies of North America*. By Eleanor L. Lord. Bryn Mawr College, 1896. Vol. XVII of the Johns Hopkins Studies.

⁴ Cambridge: At the University Press. 1898. New York, The Macmillan Co. \$1.25.

and Rush in London, and while no very essential changes need be made in our conception of the development of the doctrine, we are glad to follow it as it appeared to George Canning in London and Addington in Washington.

Some New Editions, Reprints, etc. Professor Woodrow Wilson has made a good book into a better one, by issuing a new edition of "The State."¹ We find in it corrections both of statement and of style; omissions, additions and re-arrangements of matter; fuller bibliographies and a better index. The whole treatment is brought down to date, and is specially improved as respects the early family, the social contract theory, the governments of Greece and Rome, feudalism and the diffusion of Roman law in Europe. Important recent works like those of Westermack, Fowler, Sohm, Boutmy, Lowell and Burgess are mentioned in the lists of authorities, and in some cases they have obviously affected and improved the treatment of the subject matter itself.

Mr. Ward's "Outlines of Sociology"² is made up of twelve articles written by him for the *American Journal of Sociology* during the years 1895-97, and therefore already familiar to such as follow discussions in this field. In our judgment it is a much more valuable contribution to thought and knowledge than was the author's "Dynamic Sociology," because more limited in scope, more mature in reflection, more comprehensive and sympathetic in spirit. It is to be welcomed as a vigorous vindication of the psychological method of interpreting society.

In his "Elements of Sociology,"³ Professor Giddings has sought to give "an elementary description of society in clear and simple scientific terms," "an untechnical but scientific and reasonably complete statement of sociological theory, for the use of college and school classes." How far it will prove desirable to introduce the

¹ *The State. Elements of Historical and Practical Politics.* By Woodrow Wilson, Ph.D., LL.D., Professor of Jurisprudence and Politics in Princeton University. Revised Edition. Boston, D. C. Heath & Co., 1898—xxxv, 656 pp.

² *Outlines of Sociology.* By Lester F. Ward. New York, The Macmillan Co., 1898—xii, 301 pp.

³ *The Elements of Sociology. A Text-Book for Colleges and Schools.* By Franklin Henry Giddings, M.A., Ph.D., Professor of Sociology in Columbia University. New York, The Macmillan Company, 1898—xi, 353 pp.

study of sociology among undergraduates, is not yet clear; we trust that this work will be put to such use in a large number of schools and the results closely observed. The book displays, no less than its author's "Principles of Sociology," a mind of alertness, vigor, breadth, versatility and analytic power.

The more important of Professor Henderson's two works¹ is in decided contrast with that of Professor Giddings, though having a somewhat similar aim. It is not so academic in method and style, being intended for readers as well as students. We are by no means sure, however, but that the latter class would gain from it quite as true, and a more vivid, conception of what society really is, than from the more professional treatise. Professor Henderson has a sufficient acquaintance with sociological theory, and a very wide and intimate knowledge of certain social classes, and he has blended these two in a book which we regard as particularly well adapted to the purpose for which it was prepared.

The other work of Professor Henderson² was prepared for the use of the "Chautauqua Literary and Scientific Circle," and has a wholly practical aim. It is considerably miscellaneous in its contents, but would appear to be well adapted to arouse and direct the spirit of social reform in those to whom it is addressed.

The Rev. A. P. Atterbury has translated, and the Putnams have published,³ Sombart's "*Socialismus und sociale Bewegung im 19. Jahrhundert*," which was reviewed in its French form in our last issue. An appreciative and discriminating introduction is furnished by Professor John B. Clark. We need only add that the translation, though less felicitous than the French, is in general adequate, and that there is, perhaps, no other work accessible to English readers, which compresses so much information and sound suggestion on this topic within such small compass.

The four lectures which Professor Moses has published in a thin volume⁴ are entitled: "A Fundamental Tendency;" "Conflict and

¹ *Social Elements. Institutions, Character, Progress.* By Charles Richmond Henderson. New York, Charles Scribner's Sons, 1898—ix, 405 pp.

² *The Social Spirit in America.* By C. R. Henderson, Associate Professor of Sociology in the University of Chicago. Meadville, Penn'a, Flood & Vincent, 1897—350 pp.

³ *Socialism and the Social Movement in the 19th Century.* By Werner Sombart, Professor in the University of Breslau. Translated by Anson P. Atterbury. New York and London, G. P. Putnam's Sons, 1898—xvii, 199 pp.

⁴ *Democracy and Social Growth in America. Four Lectures.* By Bernard Moses, Ph.D., Professor in the University of California. New York and London, G. P. Putnam's Sons, 1898—129 pp.

Socialism;" "Education and Democracy;" "Preservation of the Democratic Spirit." The discussion is on a high plane and of wholesome quality. We quote part of a paragraph from the third lecture: "Many of the smaller colleges of this country are chartered opponents of true education. They are established in the interest of personal pride, local prejudice, or denominational zeal, and whatever influence they exert is in favor of making superficial knowledge general. . . . They endorse it with an academic degree, which is the last assurance necessary to convince the holder that he has swept the whole intellectual horizon, and is consequently fitted for the performance of any task within the realm of intellectual effort."

Statistics of the Vocations of College Graduates. On the following page are given in condensed and abbreviated form the figures indicating the distribution of Yale College graduates among the various professions and occupations. The records of the various Class Secretaries cover the period since 1839 without a break. Records for the earlier classes are often incomplete, and sometimes wholly wanting. From those that do exist the above figures have been derived. The leading difficulty in doing so is due to the changes of occupations reported by individual graduates, more frequent in the earlier years of the century than now. So, for instance, a graduate of the College might begin to earn his livelihood by teaching, then study and practice law, and finally enter upon some mercantile career; or, another might study for the ministry, exchange that profession for journalism, and eventually retire to the country and end his days as a farmer. In each case a graduate has been assigned to that occupation in which he appears to have been most successful, generally a question of the number of years devoted to each vocation. Another difficulty lies in the fact that a considerable number of graduates make no report of their doings; they are often the unsuccessful ones, and must of necessity be disregarded. A third, but minor difficulty presents itself in the case of those who die before the final selection of their vocation. Owing to this fact, the proportion of teachers, whose occupation is so often a stepping-stone to some other, may be unduly swelled, but to no very considerable extent.

The graduates of each year were assigned to one or another of the ten occupations indicated in the table, namely: Law, Ministry,

Medicine, Teaching and Science, Business, Engineering, Journalism and Literature, Farming, Government Service (military and civil), and Miscellaneous. The relative share of each occupation was expressed in a percentage of each year's graduates; and an average percentage for five-year periods was derived and is given in the table.

YALE COLLEGE GRADUATES, VOCATION BY CLASSES.

CLASSES.	Law.	Ministry.	Medicine.	Teaching and Science.	Learned Professions.	Business.	Engineering.	Journalism and Literature.	Farming.	Government Service.	Miscellaneous.
1797 -----	42%	39%	8%	3%	92%	6%			3%		
1802 -----	33	30	8	2	73	17			9		
1813-4 -----	36	25	14	5	80	12		2	6		
1817, 1819 -----	37	26	20	5	80	15			5		
1821, 2, 4 -----	31	34	20	5	90	8			3		
1826, 1830 -----	25	27	12	9	73	9	1	2	15		.5
1831, 3, 4 -----	32	34	15	10	91	4		.3	4		
1839-40 -----	28	27	9	13	77	11	.5	2	8	1	.5
1841-45 -----	33	27	9	8	77	12	.2	4	5	2	.2
1846-50 -----	34	21	8	9	72	15	1	4	4	3	
1851-55 -----	35	19	9	9	72	16	2	3	5	1	1
1856-60 -----	31	20	9	10	70	17	1	4	5	3	
1861-65 -----	29	13	10	12	64	20	2	7	2	3	2
1866-70 -----	38	13	8	10	69	20	3	5	2	.2	.6
1871-75 -----	36	12	8	11	67	24	1	3	2	1.4	1.6
1876-80 -----	36	6	12	8	62	28	.6	5	1	.6	2.8
1881-85 -----	35	7	9	11	62	29	1	5	2	.6	.6
1886-90 -----	35	6	11	12	64	28	2	3	1	.3	1.7
1891-93 -----	35	7	8	12	62	31	1	3	1	1	1

The results of the inquiry may be expressed as follows: At the end of the last century 39 per cent. of the class became clergymen. This was almost the exact proportion (40%) which held good for the classes graduating during the first hundred years of the college's history (1701-1801). The first fifteen classes sent on an average 78 per cent. of their number into the ministry; the first fifty classes, 52 per cent.; the second fifty classes, 28 per cent. During the first half of this century the proportion remained fairly constant at about the last figure. Beginning with the middle of the century, however, the fraction of each class that entered the ministry fell off, especially in the case of the classes graduating during the Civil War and during the late seventies. Since then the figure for individual classes has varied between 3 and 13 per cent., but the average

figure for five-year periods has remained noticeably constant at 6 and 7 per cent.

As compared with the great falling off in the clerical profession, from 40 per cent. at the beginning to 6 or 7 per cent. at the end of this century, the proportion of a class choosing the law as a profession has varied little during the same period, at least if the figures are taken representing the average for periods of five years. This is especially true of the last five periods (1871-93), during which the figure was three times 35 per cent., and twice 36 per cent. It may be more than a curious coincidence that the three *maxima* of the above figure (barring the first in 1797) occur during the periods immediately following the three wars, of 1812, of 1848, and the Civil War.

The profession of teaching has attracted a fraction of each class that has varied within very wide limits. In some classes previous to the Civil War, one-fifth or one-sixth of the members became teachers; in others the fraction sank to zero. It is difficult to explain the irregular changes in this figure, unless they are taken to indicate that the teacher's profession has generally been a stepping-stone, in some years deserted for some other profession, in other years, often owing to accidental causes, permanently enrolling college graduates among its members. Since the Civil War, however, the fraction of each class becoming teachers, or devoting themselves to scientific pursuits, has varied within much narrower limits—in the case of the graduates of 1879 to 1893, between 9 and 15 per cent.—indicating that teaching has become a well recognized profession, and tends nowadays, like the law and medicine, to attract approximately the same fraction of each college generation.

The last has been distinctly the case with the medical profession, which during the five-year periods since 1841 has uniformly attracted about one-tenth of those graduating from the college, the figure falling once as low as 8 per cent., and three times rising to 12 per cent. During the second, third and fourth decades of this century it rose to an unusual height. This unusual popularity of the medical profession at that time is also illustrated, though not as conclusively, by the fact that the average number of physicians annually graduating from the Yale Medical School during the third decade of the century was not again equalled or exceeded in any single year before 1896.

As regards the above four learned professions, the law, the

ministry, medicine, and teaching, the figures conclusively show that, after attracting a larger and larger constituency from among the classes of the first thirty years of this century, the tide then turned, and from attracting nine-tenths of each college class during the early thirties, the proportion fell off steadily, with hardly an exception, till recent times. However, the last eighteen classes, arranged in four groups in the table, send a surprisingly constant fraction of their members into one or the other of the four learned professions, namely, approximately five-eighths.

The most striking fact brought to light by the table is the great increase of the graduates of the college pursuing a mercantile career. The proportion of business men in the first 20 classes of this century was temporarily high, perhaps owing to the stimulus of the foreign wars and of our war of 1812 and of its after effects. Then the fraction fell to a low level in the twenties and early thirties. Beginning with the class of 1839, the fraction rose steadily, with practically no setback, until the present time, rising most rapidly in the case of those graduating in the late forties, during the Civil War and during the seventies. From generally occupying the fourth place in importance among the occupations of graduates, business rose to the third place with the class of 1842, the second place during the Civil War, and will presumably eventually wrest the first place from the legal profession.

While the relative number of merchants among Yale College graduates has grown so much, the number of farmers has greatly fallen off. This is largely, but not wholly, explained by the disappearance from the list of alumni of the Southern planter. In addition, the greater attractions offered by the other vocations and by urban life should be taken into account.

One more occupation deserves notice, that of government service. Here it was evidently the Civil War which attracted a considerable number of graduates of the time and of previous years to the military and civil service of the government. Those graduating since the war have in but a few cases followed their example.

The general outcome of the movement as indicated in the table may be summed up as follows: The law during the past century has fairly, uniformly enlisted one-third of each college generation. At the beginning of the century the ministry followed closely in second place. Roughly speaking, the law and the ministry were then chosen by two-thirds of the class. Nowadays, the law still holds its own, but the ministry has fallen off greatly in relative

importance; its place has been taken by the merchant's vocation, which now attracts about one-third of the graduates. It is noticeable that in the case of the last eighty years covered by the table the sum of the figures for the ministry and of the one for business in each five-year period fluctuates fairly closely about 37 per cent., and that, with very few exceptions, a rapid fall in the figure for the ministry goes hand in hand with a rapid rise in the figure for business, and when the falling off in the ministry is retarded, the same is true of the rise of the figure for the business men. It would not be safe to conclude from this that the kind of men who formerly became clergymen now go into business, though this may be true to some extent. In any case, it is clear that the leadership which naturally falls to the college graduate in this country was formerly chiefly exerted from the bar and the pulpit; that nowadays, however, the industrial leaders are also largely recruited from among college graduates; that the typical college graduate of to-day is no longer the scholar, but the man of affairs.

BOOK NOTICES.

Unforeseen Tendencies of Democracy. By E. L. Godkin, M.A., D.C.L. Boston and New York, Houghton, Mifflin & Co., 1898—vii, 265 pp.

This is a book difficult to review in small compass. It contains many bright ideas and several excellent generalizations, but even the certainty of closest scrutiny attaching to anything published over the signature of the merciless editor of the *Evening Post* has not sufficed to induce Mr. Godkin to verify his ideas, and consequently his work is everywhere marred with serious overstatements and historical errors. No less than twenty such are to be found in the 225 pages which make up his main contention. His remaining chapter on "The Australian Democracy" does not fall within the province of the present reviewer. As it cites a large number of authors consulted, it may be more accurate than the rest.

When Mr. Godkin contradicts himself so flatly as with reference to the early composition of the Roman Senate, on pages 10 and 35, he scarcely needs criticism, but such statements as that "There is no doubt that the pre-Revolutionary writers were in the right way in relying on Greece and Rome for their illustrations. Up to that time the modern world, if we except England, had contributed little or nothing to the science of government" ought not to be allowed to pass uncontradicted. Together probably Switzerland and Holland, though much less familiar to English readers, had contributed more than England. Federalism with local self-government; the separation of the executive, legislative and judicial functions; religious liberty and constitutionalism, had grown up far more in these countries and among our colonial ancestors than in England; while the feudal system, out of which the representative system is said to have grown, only reached England after long existence on the European Continent. Another new thing, which held for a time in Switzerland, was the abolition of all feudal privileges, though, when the cantons rose to great power after crushing Charles the Bold, these privileges were succeeded by restrictions of the rights of citizenship to families already long established in the land, with the effect of producing almost a servile condition for the inhabitants of their subject lands, conquered from the neighboring feudal lords. Mr. Godkin speaks of the rise of the Swiss to military preëminence as of the sixteenth century. It was of the fifteenth. The great mili-

tary event to the Swiss in the sixteenth century was their defeat by Francis I at Marignano in 1515.

Mr. Godkin's definition of the use of equality by eighteenth century writers, as meaning only the abolition of special exemptions and privileges, is commendable. But in his chapter on this subject, he can hardly have remembered Nicias and Cleon when he wrote that (what ancient democracies) seem to have insisted on "was not the right of filling offices with anybody they pleased, but the right of filling them with their most competent men." Nicias, though brave, was an incompetent general, while Cleon's long career was that of a charlatan in comparison with whom many of our politicians would shine.

Mr. Godkin's remarks on the enormous increase in personal property, and on the far-reaching effects of ready communication and extended credit on the local prestige of individuals, are well founded. Two other things well said are that "If the functionaries are honest and faithful almost any kind of political constitution is endurable," and that the main defects of democracies are their disregard of experience and ability and their slowness to find the root of evil.

The next chapter on "The Nominating System" is not very profound. Bad as ours is, it is probably not so bad as that which held in England prior to the Reform Bill. Except in a few large constituencies there was then no hope for any one not nominated by, what can scarcely be better described than in Mr. Godkin's words concerning our wire-pullers, "an idle class, which either loves political intrigue or does not look further in politics than the salaried offices, and a large portion of whom either have failed in life or have never had any regular occupation." We may reach this level, but if so the reaction will as surely follow.

In considering "The Decline of Legislatures" Mr. Godkin calls the Roman Senate the prototype of all modern legislatures. This the Roman Senate essentially was not. It was a great executive council, its only legislative feature having been the common prerogative of the executives of our day, namely, the veto power. The Roman Comitia far more nearly corresponded to our legislatures. A little further on Mr. Godkin says that the English Opposition "never reached the point of seeking to take the administration of the government out of his (the king's) hands or out of those of his officers except in the rebellion of 1640." What has he to say of the revolution of 1688, where Parliament took the crown from James

II and gave it to William and Mary? Again, a few pages later, Mr. Godkin classes Germany as having the cabinet system and a parliament modeled after the House of Commons. The German parliament more closely resembles our Congress. Their ministries are even less dependent on parliamentary support than our cabinets. By a still grosser error Mr. Godkin says that "In America we have never tried the cabinet system, partly because our legislatures were started before this system became fairly established in England, and partly because in colonial times the executive was never in thoroughly friendly relations with the legislative department of any colony." Mr. Godkin is probably wholly unacquainted with the history of Connecticut and Rhode Island. Connecticut went all through the Revolution under Governor Trumbull, who had held that office for fifteen years when he left it at the close of the war. I doubt whether Mr. Godkin can point to a single serious clash between Governor and Legislature in the colonial history of Connecticut, except, under the usurpation of Sir Edmund Andros. The British government was so jealous of Connecticut's charter, and, in particular, of the right to elect their own governor, which Rhode Island also enjoyed, that the slightest trouble would have been made a pretext for abolishing its charter.

To the legislatures Mr. Godkin ascribes some troubles which seem to belong rather to the nominating system. His statement seems dubious that men of real capacity are not "willing to return for a second term because they find the work disagreeable and the reward inadequate." The remark of Jefferson is still applicable; few die and none resign. On the other hand, many are unwilling to go through with the intrigue and under-hand dealings necessary to secure a renomination. There are many men of both capacity and probity in Congress who seldom speak and to whom the salary is no object. Mr. Godkin overlooks that the essentially barbaric art of eloquence is continually losing its former influence, as quiet discussion in committee gradually displaces fervid appeals. One reason for the apparent decline of legislatures is that, whenever they were first instituted, only men of great ability could manipulate the unorganized mass so as to carry through any project, and thus they only became conspicuous. Since routine has made easy what was once so difficult, the main function of the able and public-spirited man has become much more to prevent than to encourage legislation. That the *general* level of legislatures has declined is too much to grant without most careful and detailed study of

statistics. In this, as in all other things, there are oscillations. Periods of intense feeling bring better men than usual into our legislatures. Care should, therefore, be taken to compare maxima only with maxima. The institution of legislatures has generally happened in such periods of intense feeling.

A curious assertion in this chapter is that "The difficulty of getting rid of the protective system, in any modern country, is to be found in part in the growth of Democracy." It is an interesting fact that the only two democratic countries in Europe, England and Switzerland, are the two having the freest trade. Moreover, England only obtained this freedom after the great triumph of the Reform Bill, by which democracy finally pushed aristocracy to the wall in 1832.

The chapter on Municipal Government maintains the general inaccuracy of the book. Mr. Godkin says that "No European city can be said to have owed its growth to the care or authority of the central power," and that "American cities, on the contrary, are without exception the creations of a state, they have grown up under state supervision or through state instigation." Not to go further, though exceptions are numerous, Rome and Salt Lake City are startling exceptions to his rules. He is equally mistaken in saying that "In all other countries the capitals were made by trade or commerce or manufactures, or some ancient drift of population." Constantinople, Ravenna, St. Petersburg and Madrid are striking examples of the contrary.

But he is right in saying that "What modern municipalities need, especially in America, is a régime in which, without hesitation, without study, without lawyers' or experts' opinions, the humblest laborer can tell who is responsible for any defect he may discover in the police of the streets, in the education of his children, or in the use and mode of his taxation."

Mr. Godkin reaches his climax of absurdity in the chapter on Public Opinion. He gives our American Revolution as the earliest date at which it made its definite appearance. A more striking instance of it can scarcely be found than the whole career of William the Silent. When elections and newspapers were lacking, it was his constant practice to send documents relating to public matters broadcast through the land with requests for the signatures of all who agreed with him. This was avowedly his method of keeping in touch with the common people. He knew too well how little dependence could be placed on the nobility and even on the magistrates of cities.

It was the public opinion of all northern Europe, manifested in contributions for their champion, which often cost their peasant donors part of their daily bread, which formed the one source of help which never failed him in the darkest hours of the seemingly hopeless struggle in which he finally triumphed over the greatest despotism of his time.

Public opinion has been an active force whenever a popular revolution has been successful. The early history of Switzerland is full of it and likewise that of Bohemia. The revolt of the English barons against John was essentially aristocratic, but Simon de Montfort recognized its weight when he summoned the burgesses to sit in his parliament.

Another flagrant error of Mr. Godkin's is in saying that "During the last thirty years, for instance, in the United States, it would have been almost useless to consult the voters on any subject except the tariff." Practically the tariff had been for years, as Hancock was so much reviled for saying, a local issue up to the time of Cleveland's famous message of 1887. Thirty years before this was written goes back to the reconstruction period. The Impeachment of Andrew Johnson, the Virginius affair, the Resumption, Greenback and Third Term questions would doubtless have overshadowed the tariff question as much prior to 1887 as the silver question did two years ago. Who thinks that the tariff issue helped McKinley in November, 1896?

Mr. Godkin next says the financial leaders of our Revolution were first Alexander Hamilton and later Albert Gallatin. Robert Morris was the great financier who, amid overwhelming difficulties, maintained a semblance of order in our national finances. Hamilton's connection with revolutionary finance was as an anonymous essayist. During the war he was on Washington's staff. His first activity in financial matters was in an attempt, defeated by Rhode Island, to establish a tariff under the Continental Congress in 1784. His first real leadership began in September, 1789, on his appointment as Secretary of the Treasury. Gallatin's connection with the Treasury only began in this century.

Another marvelous assertion is that "the first attempt to legislate for the economical benefit of the masses was the abolition of the English corn laws." This was accomplished by Peel in 1846. What does Mr. Godkin think of the abolition of the French corn laws by Turgot in 1774, or of the Licinian laws at Rome 2,000 years earlier.

Probably no one who reads this book will regret it, or even think the time wasted, for it is interesting in spite of its errors, or even perhaps in virtue of them.

If Mr. Godkin's mind is sufficiently open to be convicted of error, it may greatly increase his usefulness, by diminishing the tendency towards omniscience too often to be observed in the editorials of the *Evening Post*.

N. T. BACON.

Peace Dale, R. I.

System der Nationalökonomie. Von Gustav Cohn, Professor an der Universität Göttingen. Dritter Band. Nationalökonomie des Handels und des Verkehrswesens. Stuttgart, Ferd. Enke, 1898—pp. viii, 1030.

This is by far the most valuable of the three volumes of Professor Cohn's work. In a modest preface, the author expresses a doubt whether in these days of coöperative works on economics, a single individual can advantageously try to cover the whole field in a book of his own. Be this as it may, it is certain that Cohn can cover this part of the field with the utmost advantage to his readers. The book is in four parts, dealing respectively with commerce, banking, insurance, and transportation. On all of these he is an authority; on the last he may almost be said to be *the* authority. In treating them, he has the advantage of combining in almost equal proportion the historical and the analytical sense; so that one can resort to his work with equal confidence for a statement of facts or for discussion of principles. He is also essentially modern in his interests. His practical experience in coöperative law reform has made him familiar to the fullest extent, not only with methods of organization and combination of capital, but also with the methods of modern stock exchanges and their bearing on the investment market. His interest in railroad development has led him to give due importance to the relatively new subject of street railroads control.

Amid so much to praise, it seems ungracious to seek flaws for criticism. The weakest point in the book is its treatment of the telephone. The subject of telephone charges is a matter of great economic interest and difficulty. Cohn's treatment, so far from giving us any help in the solution of these difficulties, quite ignores their existence, and is, for practical purposes, entirely worthless. Of less serious importance, but worth noting, is his failure

to appreciate that the essential function of the modern discount banking system is a particular form of insurance—the insurance of commercial credit; and that its success or failure depends upon laws analogous to those which determine the success or failure of other forms of insurance. He has shown the fallacious character of other schemes of credit insurance; but has failed to see that in discount banking we have to do with a real and generally sound scheme for this purpose. We note also that his treatment of coöperative societies is based upon the commonplace idea of an antithesis between coöperation and competition; whereas the real antithesis is between coöperation and speculation. Had he held this clue in his hand, the author would have given us a profound analysis of this subject, instead of a rather superficial one. But such criticisms, which might of course be multiplied, are of little consequence when compared with the general merit of the book as a whole.

A. T. H.

Pure Economics. By Professor Maffeo Pantaleoni, translated by T. Boston Bruce. London and New York, Macmillan, 1898—pp. xiii + 311.

It is nearly ten years since Professor Pantaleoni's *Manuale di Economia pura* appeared (in 1889). Yet with the necessary additions which have been made by the author, the work is still fresh and timely. It is striking in its logical consistency, passing from point to point almost with the precision of Euclid. It is in this that Professor Pantaleoni has done his most original work, unifying and harmonizing the body of economic doctrine from various sources, and in this he shows great power.

The book is rendered particularly valuable to students from his practice of referring to the sources whence are derived the various theorems. "The principle on which I have proceeded is to mention the author, whom the student may consult with most profit to himself. This method facilitates the recollection of theorems, conduces to a study of the sources, and presents a small repertory of the latter methodically classified." (Preface.) This renders the work in a way a logical dictionary of pure economics, and is most admirable.

The book is divided into: I. The Theory of Utility; II. The Theory of Value; III. Application of the General Theory of Value to Determinate Categories of Commodities (Instrumental Com-

modities, Money, Capital, Natural Agents, Labor). At the close of the second part is a sort of appendix containing many of the propositions from Professor Marshall's Theory of Foreign Trade. The first two parts are the more exhaustive and finished, the third the more suggestive.

In his careful definitions in opening the book, especially in those of "commodity" and "value," Professor Pantaleoni is at great pains to explain that for the purposes of a logical treatment such as his, there must be no attention paid to the confused and commonly accepted meanings given to these words. They must be defined rigorously and simply.

Yet, in the third part, he defines "capital," in a way to which many might now take exception, as "direct commodities" * * employed in a certain manner, *i. e.* with a certain object." This makes a mass of direct commodities to be capital or not according to the intention of the owner, and in this he follows Mill. But he goes on toward what seems a better definition—viz: the stock of commodities existent at one time,—by saying that "under a monetary system, or under a perfect system of divided labor, every aggregate of riches being exchangeable against commodities, may be deemed the equivalent of a capital." Since this latter leads to so much more satisfactory a theory of income, and is in accord with the distinction between *flows* and *funds*, as given by Professor Pantaleoni himself, it is somewhat strange that he does not adopt it.

On page 262 it is stated that there is no relation between rate of interest and rapidity of circulation of money. But between the rate of discount and the rapidity of circulation a connection is probable, as the curves of the two are strikingly similar as shown by statistics. And with interest and discount intimately connected, there must be a connection between rapidity of circulation and interest-rate also. In fact a great rapidity of circulation with a given demand for money means a possible saving of real capital for other uses than as a circulating medium.

Typographically the book is excellent, greatly improved over the Italian original. A misprint on page 236, line 9 from top, is evident. "Higher," the last word, should be "lower," to make sense.

The book is provided with indices of authors and topics. The list of authors contains 141 names, and is itself a mark of the great industry and ability of the author, and of the value of the work to the student.

JOHN MARSHALL GAINES.

Yale University.

L'Ouvrier Americain. Par E. Levasseur, Membre de l'Institut, Professeur au Collège de France, et au Conservatoire des Arts et Metiers. Paris, Librairie de la Société du Recueil General des Lois des Arrêts, 1898—8vo, two volumes, xviii, 634, 516 pp.

Few men are better qualified to treat of the American Workingman than the author of the "History of the Laboring Classes in Europe" and the *Academie des Sciences, Morales et Politiques* could not have made a better choice when looking for a commissioner to report upon this subject. Fully equipped as a historian and a statistician, Prof. Levasseur visited this country twice, once in 1876 and again in 1893. During the second visit he spent five months in visiting factories, workshops and dwellings, and in conferring with business men, workingmen, and scholars, and on his return he spent more than three years in putting his facts into shape. Besides the copious statistical material found in the reports of our Bureau of Labor, in other government publications, and in special works, he was able to make use of the report made by the delegation of French workmen to the Chicago fair. The result of all this labor and investigation is a presentation of facts which, for some time to come, will be the standard authority for all who desire to inform themselves on any phase of the so-called labor question in our country.

The book is divided into three parts: The Workingman at Work, The Workingman at Home, and Labor Questions. In the first, which is the longest of the three and fills the whole of the first volume, the author treats at length of the progress of industry, of labor legislation, of trade-unions and confederations, of wages, immigration, strikes, boycotts and blacklists, and commercial crises. In the second part he describes the life of the workingman, his food, clothing, lodging, savings and wages; and in the third he speaks of various questions of the day, such as poor relief, conciliation and arbitration, protection, socialism. To attempt even a summary of the contents of so extended a book would be impossible in a review. Prof. Levasseur discusses the subjects that he touches upon with thoroughness and candor. His point of view is that of an economist of the liberal school. He does not see things through the spectacles of a socialist of any stripe, nor is he, on the other hand, a blind adherent of the policy of *laissez-faire*. He aims to study things as they are and to criticize laws and movements in the light of their actual effect, not in accordance with their conformation to a theory.

The strongest impression left by the book as a whole is that the general condition of wage-receivers in our country is a very fortu-

nate one compared with that of the same class in Europe. Not only are their nominal wages higher, but the cost of living is, in some respects, even less. That this state of things does not in itself produce contentment, is very clearly brought out by the author, who shows that the highly-paid American workingman may be less contented than the poorly paid Frenchman, because his ambition is greater and he is constantly comparing his situation, not with that of other workingmen, but with those who are better off than he is and whose position he is ambitious to reach. Thus, while the purchasing power of money is great in this country, its social power is comparatively small. The standard of living is high, and it requires high wages to support a man on the customary level.

It is to be regretted that the labor of the author has not been more worthily supplemented by that of the printer. Misprints in the spelling of foreign words are not rare in French books and the experienced reader will perhaps not be surprised to learn that we have "journey menbakers" in this country, that some unions give "silk benefits," that the founder of New Harmony was a Mr. "Oven," and that the United States publish industrial "atstistics." But to print 1897 for 1887 (Vol. II., page 341) and to leave a blank space where there should be a table (Vol. II., page 196) are faults for which ignorance of a foreign language cannot be pleaded in mitigation.

H. W. F.

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THE
YALE REVIEW.

FEBRUARY, 1899.

COMMENT.

The Government of Alien Races by the United States; Imperialism and the Constitution; The Proposed Plan for the Government of the Hawaiian Islands; The Economic Association and the Twelfth Census.

IF the policy of "expansion" shall prevail, there will be incorporated into the population of the United States several millions—ultimately, perhaps, a dozen millions—of people, who belong to the Malayan, the Mongolian, the Polynesian, the African, and mixed races. These will have to be governed by us, at least for a long time, for they are obviously not now fitted for self-government, in our sense of that term. Naturally the question arises, whether our former attempts to manage peoples of alien race and inferior political education have met with such success as to encourage the hope that we shall do well with this new task. We have had two such experiences, both prolonged, namely those with the Indians and the Negroes. And it is worthy of note that we have pursued opposite policies in the two cases. The Indians we have in the main treated as political infants, as wards of the nation; the Negroes, on the contrary, after freeing them from slavery, we invested with full political rights, by constitutional amendment. And the question is, Which of these methods shall we adopt in principle as concerns these new populations? Or shall we seek to combine the two? Or have both, and equally, proved ineffective? The experience of the Indians under our charge and tutelage is often alluded to in the newspapers as showing our inaptitude for such tasks; we do not remember to have seen the case of the negro

alleged. The truth, however, seems to be that we have failed quite as conspicuously and as disastrously in the latter case as in the former, and by one method as by the other. The blacks cannot for the most part vote to-day, despite the Fifteenth Amendment; and when for a season they did vote, no sort of good and several distinct sorts of evil came from the exercise by them of that function. The attempt to create and guarantee political rights by law where they neither did nor as yet could exist in reality, and to transform a subject race in the twinkling of an eye into sovereign citizens, was foredoomed to failure, as any entire or partial repetition of it will be. The wholesale introduction into the body of electors of ignorant and irresponsible, or alien, elements will not be tolerated.

If we become responsible for the management of these populations, we must definitely abandon, so far as they are concerned, the democratic doctrine that government derives its just rights from the consent of the governed and that representation is a prerequisite to taxation or other control. To be sure, we have never practiced this theory, as is seen in the long minority of the Indian, the enslavement in both North and South of the blacks and the various limitations placed here and there upon the suffrage; yet we have never ceased to profess and proclaim the doctrine.

In doing this we have laid such stress upon certain political dogmas that we have overlooked the greater importance of the maintenance of civil and economic rights as secured by the Constitution. Our public orators have created a fictitious, theoretical Constitution, into which fragments of the real Constitution and scraps of the Declaration of Independence, have been worked as in a mosaic. Even statesmen of ability and experience have come under the influence of this creation of the imagination, as the recent discussions with regard to expansion and imperialism have shown. Many men seem to think that the most powerful argument we can aim at this departure lies in the claim that it is contrary to the fundamental principles of our Constitution, because it involves taxation without representation, government established without the consent of the governed, and a

denial of the doctrine that all men are created equal. It is unfortunate that a good cause should be supported by such two-edged weapons. Historically, the Declaration of Independence cannot for a moment be put upon the same plane as the Constitution. The former was a political manifesto, issued by a revolutionary body, and, like most such manifestoes, was a rhetorical appeal for support. The latter is the fundamental law of the country, which can be quoted in court, and according to which the rights of the individual may be gauged. Leaving aside rhetoric and an appeal to the feelings, it lays down carefully and exactly the really essential maxims of good government. It very wisely leaves the subject of political rights almost untouched, allowing the States to decide for themselves who shall vote, and how the votes shall be counted; but it does lay great emphasis upon the maintenance of civil rights. It protects the citizen against unjust searches and seizures; it secures him against the loss of life, liberty, and property, without due process of law; it guarantees him the right of trial by jury in criminal suits. Practically these civil rights have done much more to make our country prosperous and great than the possession of political rights. People flock to our shores, not because they can vote, for the inhabitants of most European countries from which we receive immigrants already enjoy that right at home; but they come here because they are free to earn their own living in their own way, secure in their persons and property, and exempt from the burden of a standing army and of a military aristocracy. The right of suffrage is worth little without the ability to earn a comfortable living, as we may see in the case of the Negroes, and the lack of the right of suffrage does not seriously impair the attractiveness of the country as long as there is a chance to earn good wages, as is seen in the case of the Chinese.

The real objection to the new policy of expansion is not that there may be people under our flag who are not consulted about the government. We have endured this anomaly at the very seat of the government itself, and we can doubtless endure it on the other side of the hemisphere. But the burden of a standing army, the increase of the pension list, heavier taxation,

and a more extravagant scale of expenditure on the part of the Government are serious and practical evils which, if they become necessary, as they doubtless will in case the new policy prevails, will seriously impair the value of the United States as a place of residence, while new forms of corruption will threaten the good name of our Government. War always has a tendency to weaken the rights of the individual. The Civil War had this effect. For while it gave additional security to political rights by the 13th, 14th, and 15th Amendments, the precedent established in the legal tender cases of allowing the Government, under the supposed pressure of a war, to issue legal tender notes which impaired the obligation of contracts throughout the United States, struck a blow at the Constitution under which we are still suffering.

Meantime, we note that the commission appointed by the President to "recommend to Congress such legislation concerning the Hawaiian Islands as they shall deem necessary and proper," have reported a Bill which imposes an educational qualification for all electors and an additional property qualification for the electors of Senators, as well as a property qualification for membership either in the Senate or the House of Representatives—qualifications which leave a very considerable portion of the adult males of the new Territory without the franchise, and without ambition for high office. We trust that these features will not be stricken from the Bill before its passage, and that it will give direction, in this respect, to subsequent legislation respecting the other new possessions.

The events of the past year will be judged by the world and by posterity, not with reference to the form of government which is established in our new possessions, but with reference to the well-being of the people. We must give them justice, security, good water, good roads, freedom to develop their resources, and improved sanitary conditions. Much seems to have been accomplished in this line by Gen. Wood at Santiago; but the test of our fitness for colonial possessions will come when the military force gives way to the civil, and the army of spoilsmen takes the place of the army of occupation. The

necessity of the hour for imperialists and anti-imperialists alike is to guard against the invasion of that army, and to see that, whatever the political condition of the natives may be, the civilians sent out from this country are above reproach.

The meeting of the American Economic Association at New Haven in December last, was marked by the extremely practical character of the subjects treated. The chief place was occupied by the report of a most efficient committee on the scope and method of the Twelfth Census. Not only was this committee a strong one in itself—it consisted of Messrs. Mayo-Smith, Willcox, Wright, Falkner, and Dewey—but it also enjoyed the coöperation of outside experts like Holmes and North; and it is to be sincerely hoped that its recommendations will be heeded by the government authorities in the years immediately to come.

The first criticism directed by the committee against our traditional census methods is that inadequate time is allowed for preparing the schedules. Another criticism, and perhaps an even more fundamental one, relates to the undue number and variety of subjects treated. This causes such a scattering of power that the few things which are really most important cannot receive the attention they deserve. Our census bills are in fact like our river and harbor bills; they provide for doing a good many things poorly rather than a few things well. Much of this scattering of force is wholly unnecessary; for we have a number of established bureaus which are doing continuous statistical work, which is at least to some degree duplicated by that of the census as at present conducted. As the committee suggests, the collection of statistics of fisheries might well be transferred to the Fish Commission; of railroads, to the Interstate Commerce Commission; of schools, to the Bureau of Education; and so on, with a number of departments of enquiry. With these changes we should greatly reduce the bulk of the census; we should transfer to the bureaus in question powers which would aid them in their regular work; we should get our statistics collected at once more cheaply and more efficiently; and their results would be in a continuous

form, available for making comparisons between one year and another.

Even in the lines which could not be thus delegated to other bureaus, there is need of a similar continuity of enquiry. There are many lines where annual statistics are of great use, but where statistics collected, as we now have them, once in ten years, are of no use at all. The spasmodic character of the work makes critical accuracy unattainable; and if, as often happens, the census year is for some reason not a representative one, the census figures are positively misleading.

But, it may be asked, if we thus take away a large part of the work which has traditionally been incorporated in the census, what will be left? Very little; and that will be a great gain. Not only will it save the government a great amount of expense, which has been one of the means of debasing our civil service, but it will save the country a great amount of nonsense, which has been one of the means of misleading our amateur economists. Take as an example the statistics of manufactures, and especially those of manufacturing capital. They have been made the basis of countless arguments—for free trade or for protection, for industrialism or for socialism, for optimism or for pessimism. Yet, as General Walker himself said, there is a possible margin of error in some of these census statistics of 300 per cent.

If the decennial census were confined to its original purpose as an enumeration of the inhabitants of the various States and territories, we should doubtless lose much valuable matter; yet, independently of the saving of expense, there are many reasons for thinking that we should gain more than we should lose. In other words, there is some ground for the contention that the harm from the bad statistics outweighed the benefit from the good statistics. A policy which should restrict the scope of the operations of the next census within far narrower channels than those of 1890 and 1880, would probably secure the support of a large majority of critical statisticians and economists.

THE SOCIALISTIC MUNICIPALITIES OF NORTHERN FRANCE.

WE have long been accustomed to regard France as the most homogeneous of modern nations. The strong, despotic monarchy of the pre-revolutionary period levelled all classes before it, and thus welded the nation to a compactness and unity which was in marked contrast with the condition of other Continental countries. The economic changes of the present century have, however, produced a re-differentiation of national types resting upon differences in environment and industrial opportunity. The racial and temperamental peculiarities of different parts of the country have been made so prominent that the contrast between the industrial and urban population of the northern departments and the agricultural population of Touraine is greater to-day than it was fifty years ago. The conditions of life in the beautiful valley of the Loire differ radically from those which prevail in the monotonous and unattractive manufacturing towns of the North. This difference is more than one of pursuits. Lille, Roubaix and the other manufacturing towns of the *Département du Nord* contain a population essentially different in thought and feeling from that of the valley of the Loire.

It is not surprising that there has been a development of political opinion corresponding to these sectional differences. The discontent and restlessness characteristic of an industrial population finds expression in political radicalism, shading by insensible gradations into socialism and making the northern Departments the stronghold of social democracy. The growth of socialistic power typifies all the peculiarities of party opinion in France. Unlike the English or Americans, the French seem incapable of developing a great, compact political party; for no sooner is a new party formed than it splits into a number of factions representing minor differences of opinion. Socialism as a factor in French national politics has never advanced beyond the organization of small political groups. Although a great number of socialistic congresses have been held, they have

all failed to effect any lasting agreement between the conflicting factions. A few of the more far-seeing leaders, recognizing the difficulties in the way of agreement upon national affairs, determined to attempt a union on the basis of municipal socialism. A program restricted to purely local questions would avoid, it was believed, most of the irreconcilable differences of party opinion. This plan received much encouragement from the experience of Lille, where the socialistic party was gradually gaining in unity and strength. It was not until 1892, however, at a party convention held at Lyons, that a general program of municipal socialism was adopted. Its effect was immediately apparent throughout the country, particularly in those cities in which the lack of a common declaration of principles was the only obstacle to socialistic supremacy. In Roubaix, the number of socialistic members of the municipal council had been steadily increasing since 1884. At the election of 1892, a council composed exclusively of socialists was returned. Four years later Lille followed the example of Roubaix, electing twenty-six socialists out of a total of thirty-six members of the town council. Soon after, the socialists obtained large majorities in Calais, Croix and Hellemmes; thus bringing five towns under the control of the party.

The immediate cause of this rapid growth of socialistic opinion was the discontent consequent upon a number of years of industrial depression. The great coal strikes of 1890, the depressing effects of the McKinley tariff upon French industries, together with the high price of grain, all contributed to bring about the ready acceptance of any political creed that promised immediate relief. As in the case of German Social Democracy, discontented elements flocked about the socialistic standard. One would go far astray, however, to judge of the number of socialist converts by the vote of the party; the large majorities of 1892 and 1896 were in the nature of a protest against existing conditions rather than an acceptance of the tenets of socialism.

Notwithstanding the overwhelming majority of the socialist party in the town councils of these municipalities, the period of their supremacy records but few socialistic experiments. It

illustrates the doctrine of socialists when in power rather than the practical application of socialistic principles to the problems of city government. This is clearly shown by a comparison of program of the party with its activity. The principles of municipal socialism as formulated by the Lyons convention were as follows:

First—All school children to be provided with luncheon at the lowest possible price by the municipality. Pupils to receive clothes and shoes twice a year free of charge.

Second—All contracts entered into by the municipality to contain a clause prescribing an eight-hour working-day and a minimum salary, the latter to be determined by the municipal council after consultation with the trades unions.

Third—The creation of a Bourse de Travail, to be managed by the trades unions.

Fourth—Abolition of the "octroi" on all food products.

Fifth—A progressive tax on rents. Low rents to be exempt from taxation. Improvement of unsanitary dwellings by the public authority at the expense of the proprietor. Improved and unimproved real estate to be assessed at market value.

Sixth—Establishment of municipal maternity hospitals, asylums for the aged and infirm, and public lodging houses. Workingmen in search of employment, but without fixed domicile, to be fed at the public expense.

Seventh—Free medical service. Medicines to be provided at cost by a public pharmacy.

Eighth—Free municipal bath- and wash-houses.

Ninth—Establishment of municipal sanitariums for the children of workingmen. The public treasury to provide for the placing of children in health resorts.

Tenth—Free legal advice to workingmen by a specially designated officer of the municipality.

Eleventh—All municipal officials to receive salaries equal, at least, to the highest artisan rate, thus enabling workingmen to accept public office without great personal sacrifice.

Twelfth—Creation of Boards of Arbitration and Conciliation.

Thirteenth—Publication of an official municipal bulletin containing announcements of all decisions of the Council.

The insignificance of many of the changes advocated, and the extreme expression of class spirit in others, are alone sufficient to condemn the program when viewed from the standpoint of social welfare. A dwarfed view of the rôle of the municipality pervades every article. Workingmen are to be made the objects of public charity, the expense to be borne by the well-to-do classes. But the sins of commission are hardly more flagrant than those of omission. No mention is made of the relation of the municipality to quasi-public works, to questions of higher education, public amusements, art, music,—in short all the really important problems that confront the modern municipality.

Compared with this platform, weak as it is, the results accomplished by the socialists seem even more paltry. Either they have neglected to deal with the more important articles of the program or have lacked the necessary authority to do so. This is particularly evident in Roubaix, where the socialists have had complete control of the council for over six years.

One of the first questions to which the socialistic council of that city addressed itself was the readjustment of the "octroi," a tax in the nature of an excise upon food products, household articles, etc., levied at the city gates. It is one of the most important sources of revenue, particularly in the larger cities. Considerable freedom is allowed the municipal authorities in the adjustment of rates, which makes it possible to discriminate against one class of goods in favor of another. The socialists, ever ready to shift the burden of taxation from the workingman to the wealthy, undertook a thorough and systematic revision of the octroi rates. The revision of the schedules was complicated, however, by the fact that the city's finances would not permit a diminution of revenue. Nevertheless the tax on most of the articles in general use was reduced while the rates upon luxuries were increased. The financial results far surpassed the expectations of the Council; the revenue from the octroi showing an increase of \$30,000 during the first year of the new rates. None but the prejudiced political opponents of the socialists will deny the success of the efforts of the Council in dealing with this vexed question of local taxation.

The further attempts to enforce the socialistic program have given rise to far greater differences of opinion. The most striking, nay pathetic, feature of the policy of Roubaix and Lille has been the pettiness of the problems in which the principles of municipal socialism have been exhausting themselves. For this the Council is but partially to blame. Under the tutelage of the central government, it has played the part of an unruly child, willing to venture upon forbidden ground and determined to make political capital out of the few possibilities within its reach.

Soon after the readjustment of the "octroi," the Council took up the question of the *cantines scolaires*. The foreigner finds it difficult to understand the importance of this question in French local politics. If he happens to arrive in one of the towns of northern France just before an election, he will hear the blessings of the *cantines scolaires* dwelt upon at great length. If unacquainted with the meaning of the term, he will probably conclude that the municipalization of street railways or some question of equal importance is at issue. When he learns that all this praise is being lavished on the policy of the Council in serving warm luncheon to school children, his belief in the power of the socialists to reorganize municipal life receives its first shock. Further examination will show that this is one of the few instances in which the municipality is given freedom of action. It is not surprising, therefore, that the local authorities should avail themselves of the opportunity and make the most out of a relatively unimportant matter. With as little delay as possible, the Council of Roubaix established a system of warm luncheons. The children of well-to-do parents are expected to pay from three to four cents per meal; whereas those of the poorer classes receive everything free. The system has undoubtedly done much towards improving the health of the children, and indirectly increasing the efficiency of their work.

Encouraged by the success of the *cantines scolaires*, the Council of Roubaix extended the system so as to include the free distribution of clothes and shoes. During the winter of 1895, 700 caps, 800 trousers, 2,400 undershirts, 4,600 pairs of

stockings, 4,600 pairs of shoes, 2,800 shirts and 2,000 aprons were thus disposed of. Everyone acquainted with the danger of indiscriminate almsgiving will seriously question the wisdom of such a plan. The public care of children is, however, one of the principles to which the French socialists attach great importance, and which they are anxious to place in operation at the earliest opportunity. One of the first acts of the socialistic Council of Lille was to organize a system similar to that of Roubaix.

Another of the principles of the party platform which the Councils of Roubaix and Lille have been able to carry into effect has been the organization of a system of free legal advice to workingmen. A lawyer elected by the Council is assigned to this duty. While there is no evidence that the system has encouraged unnecessary litigation, there is constant danger that it will have this effect. It seems likely that the plan will be extended to enable combinations of workingmen to maintain a legal struggle at the expense of the municipality.

The extension of the system of municipal sanitariums is a question to which the Councils of both cities have given considerable attention. To supplement the work of the public hospitals, they have entered into arrangements with public and private sanitariums in coast and mountain health resorts, thus giving sick and invalid children the benefit of change of air.

The establishment of public nurseries has also proved of great value. Where women are as extensively employed in factories as is the case in all manufacturing centers, the public nursery assures better care and far more healthful surroundings during the hours of work, than would be possible in the home. The *crèches* of Roubaix are model institutions, and will certainly do much to diminish the appalling infant mortality now prevailing.

To complete the picture of socialistic activity, it is necessary to add to this list of actual changes in local policy, the cases in which the efforts of the town council have been blocked by the determined opposition of the central government.

At one of the first meetings of the Council of Roubaix, after the first socialist victory, an effort was made to obtain for the municipality the power to fix a minimum wage in all employ-

ments. As it was clear that no such power could be exercised under the provisions of the existing municipal code, the proposition took the form of a request to the central government for additional powers. As was to be expected, the request was ignored. The Council then proceeded to pass a resolution that the working day be reduced to eight hours in all services under the direct control of the municipality, and that a similar provision be inserted in contracts for public improvements. To prevent a reduction of wages corresponding to the reduction in hours, it was further provided that the minimum wage be inserted in every contract; the rate to be determined after consultation and agreement with the trades unions. This resolution of the Council was annulled by the Prefect, acting in accordance with the decision of the Prefectural Council, on the ground that it violated the principle of industrial freedom and that the municipality was without authority to introduce into its contracts conditions as to wages and hours.

During this conflict, Roubaix was considering the advisability of establishing a municipal pharmacy. It was decided to begin on a small scale, twenty-five thousand francs being voted for the purpose. This ordinance was also annulled by the Prefect, on the ground that the Municipal Corporations Act of 1884 did not authorize the creation of such an institution, and that the municipality could not increase its powers beyond those specifically granted. The next move was to provide for the establishment of a municipal bakery, to furnish bread to the Bureau of Charities, and to the various charitable and correctional institutions. The ultimate end in view was to supply bread to the inhabitants at the lowest possible price. In 1893 the ordinance was passed, but was met with the declaration of the Prefect, that no authority for such action was vested in the municipality. In 1895 and 1897, further attempts were made in the same direction, but met with no better success.

In the administration of public charity, the socialists have also endeavored to apply the principles of the party, which declare public support to be the imprescriptible right of every citizen. The Council had long objected to the distribution of bread through the poor law authorities,—the *Bureau de Bien-*

faisance,—on the ground that it involved the odium of a public designation of the recipients of alms. A plan to place the distribution of bread in the hands of the coöperative stores of Roubaix was proposed. Unfortunately for the Council, the administration of the service is not under its exclusive control: it elects but three of the seven members of the Board of Public Charities, the remaining four being appointed by the Prefect, and are therefore acting as agents of the central government. As such, they promptly refused to adopt the Council's plan.

In much the same way the attempt to secularize the public charities was frustrated. Antagonism to everything that savors of clericalism led the Council of Roubaix to demand the immediate dismissal from the city hospitals of all nurses belonging to the Catholic orders. But the votes of the representatives of the central government in the Board of Charities again prevailed, resulting in the maintenance of the existing system.

From this review of the activities of these municipalities—of which Calais, Croix and Hellemmes furnish duplicates on a smaller scale—it is evident that but little light is thrown upon the practical possibilities of socialism. The lessons they have to teach lie in another direction. As instances of the position occupied by the municipality in a country in which centralization has been carried to its logical consequences, they offer one of the most interesting studies in the development of local as related to national political ideas.

With the development of the modern centralized state, the municipality has come to be regarded, primarily, as the agent of the state in the administration of civil government.¹ This view has been strengthened by recent industrial changes. Thus the street railway system, which has heretofore been regarded as a service of purely local importance, is gradually outgrowing these limitations. The introduction of electricity as a motive power, with the attendant growth of inter-urban lines, is taking from the municipalities the control of this service. The same is true of the water, gas and drainage systems.

¹See Goodnow, "Comparative Administrative Law"; Dillon, "Law of Municipal Corporations," Vol. I.

The establishment of state boards of control, the creation of water, drainage and park districts, indicate the increasing interdependence of the territorial divisions of the state. The growth of national feeling has destroyed the concept of the city as an independent political unit; economic changes are gradually substituting larger territorial districts for the municipality as the unit of utilization.

The mere statement of these conditions is sufficient to justify state control over local subdivisions. The lessons of long experience have made this one of the political axioms of modern nations; in fact, so strongly has the principle been emphasized that the administrative organization of most of the countries of Continental Europe requires modification in exactly the opposite direction. In France, the demand for "decentralization" has been repeated with increasing force since the downfall of Napoleon. With the possible exception of the strongly reactionary group of the early 50's, every political party has pledged itself to give to local institutions greater freedom and power.

But the efforts to overcome the traditions and ideas inherited from the period of absolute monarchy have hardly accomplished the end intended. Since the reign of Louis XIV, the French have been schooled to the subserviency of the local units to the central government. The power of a despotic, centralized authority, whether elective or hereditary, depends largely upon the character of its control over its territorial subdivisions, whereas the development of a distinctive local life, of ideals and feelings fostered through local ties, is inherently antagonistic to the maintenance of strong, centralized control. The French monarchy established its strength upon the subserviency of the provinces and communes; the Revolutionary government, dominated by the missionary spirit, endeavored to force its principles upon the recalcitrant local authorities. Napoleon simply continued the policy to which he fell heir, developing it in certain directions in order to strengthen his hold on the country. The various republican and monarchical governments that have succeeded one another during the present century, have conformed to these political habits and

traditions. It is true that the Third Republic has made a determined effort to give to the urban and rural subdivisions a certain amount of freedom in the determination of local policy; but in spite of these efforts, the communes seem ever ready to look to the central government for guidance, while the latter regards its power as largely dependent upon control over local politics. The introduction of parliamentary government has increased the incentive to maintain strict central control. A ministry must keep the electors in the communes in harmony with its policy, in order to command a majority in the Chamber of Deputies.

This control of the central government furnishes the clue to the inability of the town councils of the socialistic municipalities to effect any radical changes in local policy. It also explains the indifference of property owners to the spread of revolutionary opinion. Where the council is the central organ of the city government, as is the case in France, one would naturally expect that the socialistic triumphs would arouse a feeling of uneasiness as to the security of property rights. The town authorities neglect no opportunity publicly to express their opposition to the existing social system. In September, 1897, I found the city hall of Roubaix covered with large placards denouncing the capitalists in unmeasured terms, and demanding for the workingmen a share "in the common heritage." These outbursts are regarded by the well-to-do classes as expressions of irresponsible political opinion. As long as the central government remains free from socialistic taint, private property has nothing to fear. Although political conditions fully justify this feeling of security, its existence indicates a condition of political irresponsibility which threatens to sap the vitality of national as well as of local institutions. Freedom of opinion, with its resulting diversity, is an essential requisite to popular government. But responsibility must accompany each phase of political opinion; otherwise public life loses its vigor and elasticity. Conditions that permit a party to use its platform for purposes of agitation merely, must result in the most extreme forms of class antagonism. Under ordinary circumstances, the possibility of

acquiring power exerts a sobering and restraining influence upon political parties, for they may, at any time, be called upon to make good their promises. Where, however, political success carries with it no political obligation, all the ordinary safeguards against violent and ill-considered action are removed. This is precisely the situation of the socialists in France. They are given all the advantages for agitation with none of the responsibilities that come with power. The socialistic town councils can thus meet the demands of electors without incurring the risks which the enforcement of their decisions would entail. Socialistic candidates are able to point to a great number of measures passed by the votes of the party, but rendered ineffectual through the opposition of the central government. The party leaders pose as martyrs, while the loyalty of the rank and file of electors is strengthened through the conviction that they are being persecuted by their political opponents.

This unfortunate result is but one of the consequences of the extreme subordination of local to national political opinion. Because of this relation, government becomes associated with the idea of oppression and persecution, which creates a feeling of opposition to authority of any kind. Sudden revulsions of popular opinion and political instability inevitably follow. In such an atmosphere parliamentary government cannot survive. For its successful operation, a well-developed spirit of association and of political self-restraint, a respect for the rights of minorities and a keen sense of political responsibility, are necessary. All these qualities can best be developed through the constant contact with public affairs afforded by vigorous local institutions. Where these are lacking, as has been the case in France throughout the present century, we are certain to find a low level of political education, sudden changes of political feeling and a rapid growth of irresponsible political groups. The socialistic municipalities furnish abundant illustration of these conditions.

Of the many and perplexing problems now confronting the country, there is none more closely associated with the future of national power and influence than the development of local

self-government. In order to give national politics the stability necessary to progress, local institutions must impress upon the population the responsibilities of power. Where the central government assumes the control of local policy, political opinion follows the fancy and caprice rather than the judgment of the community. Under such conditions, local institutional life offers no resistance to the spread of revolutionary doctrine, thus making interference from without necessary to preserve social order. The gap between local policy and local opinion constantly widens, and leads to periods of political unrest in which the maintenance of political liberty becomes a cloak for the worst forms of despotism.

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THE DYNAMIC LAW OF WAGES.

AMONG the larger gifts of early economics to later thought is the theory of natural value. The price of a commodity is natural when it equals the cost of producing it. If the entrepreneur who makes a commodity can sell it for enough to pay interest on all the capital that he uses, wages on all the labor that he employs, including any labor that he himself may perform in the management of his own business, and nothing more, the price is at its normal level. It is a no-profit price.

Two extensions of this principle are necessary, if it is to tell what is true. Not one article, merely, but all articles must sell at cost prices, if the value of any one of them is to be natural. If the article A sells at cost, while B and C sell for more than cost, then the value of A, in terms of B and C, is unnaturally low. Value, in a classical sense, is relative. The extension of the régime of cost values to the including of all commodities is a mere corollary of the classical method of stating the principle. There must be a universal régime of no profits, if the price of any single thing is to satisfy the classical requirement concerning the natural price.

A second extension is equally necessary; and this is contrary to traditional modes of thinking. The cost of all parts of the supply of an article must be uniform. If bad methods prevail in some mills, or if inferior management is found there, then the cost of the products of these mills is unnaturally large. The value of the goods shows no tendency to conform to the cost of this particularly expensive part of the supply. These mills having bad methods or inferior managers must change their methods and their management or stop running altogether. The better mills are making profits, and they are enlarging their output. This is bringing down the price of the goods and forcing one after another of the inferior employers to change his methods or to fail. The price of the product is tending continually downward toward the cost, not of the most expensive, but of the least expensive part of the supply. In the

absence of further improvements of method, and of other disturbing influences, the value will remain stable, not even at the cost that is now incurred in the best establishments, but at the cost that will hereafter be incurred in these shops of greatest efficiency, when they shall have sufficiently enlarged their products to appropriate the whole market to themselves. This mere enlargement of the output means additional cheapness. Uniform costs and minimum costs are thus necessary for the realizing of the classical idea of a value that is natural. Competition is forcing all values toward this level of minimum, no-profit prices. In the absence of movements that we term dynamic, all prices would reach that level and hold it.

The cost of producing an article in the worst situated establishment has, then, no price-regulating power. Price shows no tendency to settle itself at that rate and stay there. Rather does price itself determine the cost that is incurred in the worst situated establishment; for, it determines how bad the situation may be and permit the intrepeneur to survive.¹

The true static or natural price equals the cost that the more efficient establishments would incur if improvements were to cease, and if these better concerns were to absorb the lion's share of the business.

As thus enlarged the classical theory of natural value is essentially a theory of static value. It tells what commodities would exchange for, if all the disturbances and readjustments that are described by the term dynamic were to stop, and if competition were to go on in ideal perfection.

A complete conception of a static state includes much more than this. It requires that costs themselves should conform to some law. The costs to an entrepreneur resolve themselves into wages and interest. These are normal if a unit of labor is as well rewarded in one industry as it is in another, if a unit of capital is so, and if a unit of either one of these agents always gets exactly what it produces. The different industries of society can never be in a state of static equilibrium unless labor,

¹ The continuous falling out of the more inefficient establishments checks the rate at which the entire product enlarges, and so influences the degree of rapidity at which price falls toward its true static level. This is the only way in which maximum cost acts causally on price.

for example, is as productive in one of them as it is in another, and unless, further, it everywhere receives, in wages, what it makes over to the employer, as a product.

We cannot here stop to prove that wages do tend to equal the product of labor, and that interest tends to equal the product of capital. That would be presenting a whole theory of static distribution. What is clear, however, is that if either laborers or capitalists get less than they produce, there is a profit somewhere; and, in the absence of monopoly, a profit always makes employers bid against one another for laborers and for capital. Profit is a sign that the value of something must fall, and that wages and interest must rise. Society is never in a state of equilibrium when any one class of employers is under the inducement to enlarge its output of goods, and to create the condition of falling value and of rising wages and interest that that involves. A static state requires that wages and interest should be uniform, and they should exactly conform to the products of labor and of capital. Values are natural only in such a state. The minimum no-profit prices of goods could be realized only in a condition that should afford uniform wages and uniform interest, both based on the productivity of the agents that earn them. Very great is the extension of the classical rule of cost prices, if it is to become a true law of natural value.

We now perceive how far such a static adjustment of value, wages and interest is from being natural in the higher sense of being in accordance with nature in a progressive society. It is natural only as a level and glassy surface of the sea is natural on a stormy day. The actual surface of the water tends toward that level and smooth form; but nature does not design that it shall assume that form and keep it.

The static condition of society is completely ideal; it is an imaginary adjustment of different industries that projects itself through the actual adjustment, and shows variations at nearly every point. It is like the imaginary level surface of the sea that projects itself through the waves of the actual ocean. Stop the winds and all other disturbances, and the imaginary sea level will become the real one; the crests of the waves will

subside to the static level, the troughs between them will rise to it, and the sea will be in the condition in which the water, though it is perfectly mobile, does not move.

The static surface of the sea is the one from which to measure height of waves and depth of troughs; it is needed for a study of water in a dynamic state. Moreover, the static position of the water is the one toward which the position of the waters of the stormiest ocean are at every moment tending, under the mere influence of gravity. The actual surface of the water is hovering about the static level, and considering the magnitude of the forces that are disturbing it, it seems miraculously near to it. The height of waves is infinitesimal as compared with the width and depth of the ocean, and to a general view taken from no great height or distance the sea looks smooth.

Something of this kind is true of the imaginary static society that projects itself through the disturbed group system of actual industry. While there are variations everywhere, they are, on the whole, relatively slight; and it is even possible, in a somewhat crude stage of economic thinking, to content ourselves with the static adjustment as the only one that is called for by pure theory, and to charge variations from it merely to economic disturbances or to friction. We should then say, theory calls for a régime of cost prices, disturbing influences make actual prices to hover about the cost level, now above it, and now slightly below it; but the variations in part offset each other. In the main, the rule of cost holds. In like manner we might say that wages and interest hover about the ideal rates that are fixed by the specific productivity of labor and of capital. In our theory we may get rid of the variations here, by charging them to economic friction. About a science of disturbance and of friction we should not then trouble ourselves.

In Political Economy this will not do. There are disturbances that are perfectly normal, or according to nature. What is of more consequence is that the static standards of value, wages and interest are themselves changing. Economic theory must account first for natural variations from what, in a narrower sense of the term, are natural standards, and secondly for the

changes in the standards themselves. This is the chief content of a theory of Economic Dynamics. Without it, Political Economy would be about as complete as a physical science of the phenomena of the sea would be, if it took no account of natural movements of water.

There is a dynamic law of value; but what it gives is not any one standard to which the selling price of an article tends to conform. It gives a movement of price, or a rate of change in value as it is expressed in money. There is a dynamic law of wages and interest; and what it gives is a rate of change in the earnings of capital and of labor. If there be such a thing as a dynamic standard of wages it is a moving standard, which the actual rate forever pursues.

Of the various economic changes that constitute a dynamic state we will single out one for study;—improvements in the method of production. Such a change always affects values, wages and interest. It gives to society always a new wealth-creating power; in the end it enables every one to get a better income. Improvements, however, come first locally, and give profits to the particular entrepreneurs who first use them. Somebody makes the article A more cheaply than others can make it. Competition requires that this special gain shall be diffused. First, the different establishments within the subgroup must adopt the method, or one that is equally effective; and secondly, the output of the goods must be enlarged up to the point at which the reduced price of the goods will give to men in other industries definite shares of the gain secured by the improvement. When this adjustment is accomplished, the men who make the article A, notwithstanding the great amount of it that they can make, will create no more value than the man who creates B, C, D, etc.

This is saying that competition bestows on the men in every industry a *pro rata* share of the fruits of improvement in any one industry. It tends to annihilate profit, and to give the permanent benefit from every industrial improvement to laborers and capitalists. It follows, therefore, that all laborers and capitalists of all society inherit the fruits of improvement made at any one point in society.

Improvements, then, first create profits for the entrepreneurs who make them. Secondly, they increase wages and interest everywhere. In a fuller discussion something would have to be said about the differing effects that they produce on wages and on interest. For that we have no time here. They add to the earning capacity of a unit of labor; and where there is no increase of the amount of capital to be taken into account, they add, in a somewhat different way, to the earning power of a unit of capital. Labor and capital are the heirs of progress, the permanent holders of every gain that civilization makes. The profit that an improvement at first secures for an entrepreneur, competition wrests from him, and gives to laborers and capitalists.

If wages and interests were at a static level, and a single improvement were to be made, and no more, then wages and interest would rise to a new and higher static level and stay there. If improvements occurred in a series, at regular intervals, and if the gains from one were entirely diffused before another were made, the earnings of labor and capital would reach one static level, then another, then another. The levels would be stationary, and separated like rungs of a ladder. With improvements taking place as rapidly as they actually do, wages and interest never reach any static level at all. Long before the effects of one improvement have been diffused another is made. With the first improvement, and the beginning of the process that diffuses the benefit of it through society, the earnings of labor and capital begin to increase. They rise by one short step toward the new static level, when, behold, a new improvement appears, and the static level is put farther off. Every improvement, as it comes, adds something to the amount that laborers and capitalists will ultimately get.

We shall avoid some complications if we confine our attention to wages. At every moment they are struggling upward toward a natural or static rate. If that rate were stationary, they would reach it; but the static standard also rises. The natural rate is rising, and the actual one is pursuing it at a certain interval.

The illustration of the sea and its waves may be made to represent these economic facts. Let the wind cease, and let the

surface of the water become smooth, but pile a great wave, or mountain of new water, upon some part of the surface. It will create disturbances everywhere; it will cause all the water in the sea to readjust itself. When the process is over the new surface will be higher than was the old one. Something like this would happen when a single improvement were made, if the fruits of it were diffused before another improvement were made.

Pile different mountains of water, in quick succession, on the different parts of the surface of the sea. Let one of them come before its predecessor has had time to diffuse itself. You prevent the actual surface from ever reaching a static level,—but you also cause the static level itself continually to rise. Profits are, normally, additions to the output of social industries. They come first locally; they diffuse their effects everywhere, causing the standard of pay for labor to move upward, and causing the actual rate to follow the rising standard, though lagging behind it in the upward movement.

A dynamic theory of wages studies velocities and intervals. It tells when the rate of pay for workmen is increasing as rapidly as it should do. It tells us also what makes it lag behind the rising standard rate. Is there an ideally right interval between wages as they are and wages as they would be, if the profit that now exists should thoroughly diffuse itself throughout society? There is so. The interval affects the rate of the movement, and it at its best when the movement is most rapid.

I can see no limit except a moral one on the rate at which it is desirable that wages should increase; and the normal limit is too remote to be taken into account. If workmen were in danger of living in sybaritic luxury and giving themselves over to gross pleasures, the moralist might wish, if it were possible, to put a veto on the more rapid increase of men's earnings. Short of such an impossible rate of increase, I can see no limit on what it is desirable that men should, from day to day and from year to year, add to their earning capacity. If, therefore, there is a normal interval between the actual rate of pay and the standard rate, it is that interval which, by its effects, will cause both rates to move upward as rapidly as possible.

We have no time to describe the manner in which the interval affects the rate; but it is the fact that, if wages are to rise rapidly, they must lag, by a certain distance, behind the rising standard. If they were to pursue it too closely, the two rates would both move upward only very slowly. The interval means profits. The improvement that will one day put additional earnings into everyone's pocket should, for a time, put a profit into the pocket of the men who make it. Instantaneous diffusion of this benefit would mean that the entrepreneur would have had no inducement to make the improvement at all;—if he made it, it must be from altruism or scientific enthusiasm. The generally potent motives appeal to the entrepreneur's self-interest. It must pay and pay well to make improvements. The more numerous they are, and the greater they are, the more rapidly will wages rise.

Profits, as secured by the interval between rising wages and the rising standard of wages, insures additions to capital. All these additions to capital have the effect of increasing the rise in wages that is traceable to mere improvement itself. They also have the effect of counteracting the rise in the rate of interest that mere improvement would occasion. As a resultant of these two causes, it might be shown, if we had time, that wages are pursuing the static standard upward and that the rate of actual interest is closely accompanying the static standard downward. There is not much of an interval to be taken into account in the case of interest. Genuine monopoly is the great disturber and obstructor. It means profits that are extorted from the public, rather than created. Among the more difficult tasks that dynamic theory must undertake is the untangling of the threads of unlike influence exerted by the great masses of capital that are loosely termed monopolies.

Movement, not position, is of supreme importance in connection with the standard of wages. The direction and the rate of the movement of that standard test the character of an industrial system; and the influences that determine the direction and the rate of it are to be the chief subject of the Political Economy of the future.

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VALUE AND ITS MEASUREMENT.

DR. FRIEDRICH VON WIESER says that "in economy value decides everything."¹ It is the controlling force in industrial life, determining in what direction labor and capital shall be expended, and in what proportion the products of industry shall be divided. The theory of value, therefore, must be the foundation of economic science, and as the main volume of economic study passes over from the methods of logic to the methods of natural history—the investigation of actual phenomena,—some change in the conception of value is to be expected.

Professor Patten describes² the progress of economic thought from the exclusive consideration of physical environment on the part of the Physiocrats, through the various stages of transition to the present tendency to make the differences in the wants and actions of men the corner-stone of economic theory. This increased consideration of the human element is causing a change in the idea assigned to the word value by economic writers.

The old method of regarding wealth as the result of physical environment, and of measuring it in terms of commodities, led to an abstract science, and economic terms were robbed in part of that personal color and life which they have retained in popular usage. Value has been commonly defined as "the ratio of exchange between commodities," or "purchasing power." If a bushel of wheat exchanges for a hat, each is said to express the value of the other, and, to tell whether any object has risen in value, we must simply ascertain whether it exchanges for more of other things than it did before. On the other hand, in popular language value is more directly connected with human feeling. Anything is valuable which satisfies want and cannot be replaced without effort or sacrifice. The more

¹ *Economic Journal* for March, 1891.

² "Wie man über den Werth urtheilt, muss man aber, wenn man folgerichtig bleibt, letztlich über die Wirthschaft urtheilen."—*Der Natürliche Werth*, p. vi.

³ *Theory of Dynamic Economics*.

urgent the want whose satisfaction is dependent upon a particular object, the greater is the value of the object. Economic theory has maintained that a dollar has the same value to one man as to another so long as it purchases the same amount of goods, while everyone has an instinctive sense that a dollar is more valuable to a poor man than to a millionaire.

Professor Perry noticed the difficulty arising from this disparity, but saw no remedy for it. He says:¹

"The notion of value is not conceivable except by a comparison of two things, and what is more, of two things mutually exchanged. Political Economy, therefore, is based on a relative idea, and has to do from beginning to end with a relation. Now in this there is an inherent difficulty, and a difficulty too which can never be obviated. It lies in the very nature of the subject. Men much more readily apprehend an absolute idea than a relative one. They more easily follow a discussion touching the independent attributes of single objects . . . than a discussion touching value, which is not an attribute of any one thing, but a relation subsisting between two things."

Grant that value is merely the ratio of exchange and we have for the foundation of economic theory only unstable commodities for each of which our esteem is constantly changing; fluctuating with every change of environment, and with every step of progress.

This colorless concept of value as a mere relation between commodities was not established by the founders of modern economic theory, and its introduction has been, I believe, a hindrance to the progress of economic science rather than a necessary step in its development. Adam Smith recognized that the values of commodities are essentially variable, and looked for a standard of value which would have a constant relationship to human well-being. This standard he found in human labor:

"What everything is really worth to the man who has acquired it, and who wants to dispose of it or exchange it for something else, is the toil and trouble which it can save to himself, and which it can impose upon other people." The

¹ *Elements of Political Economy*, p. 54.

employer purchases labor "sometimes with a greater and sometimes with a smaller quantity of goods, and to him the price of labor seems to vary like that of all other things. It appears to him dear in the one case and cheap in the other. It is the goods which are cheap in the one case and dear in the other."¹

Ricardo, at the opening of his discussion, accepts Adam Smith's definition of value in exchange of an object as "the power of purchasing other goods which the possession of that object conveys,"² but like Adam Smith he at once discards the commodity standard in estimating the goods:

"If any one commodity could be found which now and at all times required precisely the same quantity of labor to produce it, that commodity would be of an unvarying value, and would be eminently useful as a standard by which the variations of other things might be measured."³

"The labor of a million of men in manufactures will always produce the same value, but will not always produce the same riches." . . .

"That commodity is alone invariable which at all times requires the same sacrifice of toil and labor to produce it."⁴

Malthus was still more clear and emphatic in his rejection of the commodity standard of value. A change in purchasing power, he maintains, is not a change in value unless it arises from causes intrinsic with the article under consideration:

"It has often been stated that the value of a commodity is determined by the sacrifice which people are willing to make

¹ *Wealth of Nations*, Book I, chap. 5.

² *Wealth of Nations*, Book I, chap. 4. Ricardo's *Political Economy*, chap. i, sec. 1.

The statement that value in exchange is "the power of purchasing other goods" does not define the term. If the "other goods" for which the object exchanges are reckoned simply by number and size the definition seems meaningless, for there is no limit to the number of different things for which a valuable object may be exchanged. But if, as seems often to be vaguely understood, the "other goods" are to be estimated not by their number but by their values, we find the term which we wished to define involved in the definition.

We must either look deeper for the real meaning of value or accept the ratio concept.

³ *Political Economy*, chap. i, sec. 1.

⁴ *Political Economy*, chap. xx.

in order to obtain it. . . . It is obvious, therefore, that the sacrifice which we are willing to make in order to obtain a particular commodity is not proportioned to the quantity of any other commodity for which it will exchange, but to the difficulty with which such quantity, whether more or less, is attained. Now labor can measure this difficulty, but nothing else can."¹

Malthus, like Adam Smith, looked upon exchange value as a token of subjective estimation, and sought for a standard by which the value of commodity (e. g. the monetary unit) at different times and places could be measured and compared. The command over labor, of which the ordinary agricultural labor should be the unit, was considered the most exact standard.

Ricardo, on the other hand, disregarded the subjective nature of value and directed his efforts to the explanation of the relative values of commodities. On the ground that commodities tend to exchange on the basis of the amounts of labor which they embody, Ricardo took the labor necessary for the production of a commodity as the foundation and therefore the measure of its value. Just what Ricardo meant by measure of value is by no means clear; but his position toward the value problem prevailed among English economists, and soon led to the ratio concept as set forth by Mill and his followers, who declared values to be entirely relative to each other, and a general rise or a general fall in values, therefore, to be logically impossible. To speak simply of the value of an ounce of gold, says Jevons, is as absurd as to speak of the ratio of the number seventeen. Mill seems to have been more acute than the most of his followers when from his definition of value he deduces² the fact that a "measure of exchange value" is "impossible";

¹ *Definitions in Political Economy*, pp. 211, 212.

"Intrinsic value in exchange, which may be defined to be the power of purchasing arising from intrinsic causes, in which sense the value of an object is understood when nothing further is added. This definition is precisely equivalent to the estimation in which a commodity is held, founded on the desire to possess, and the difficulty of obtaining possession of it."—*Political Economy*, 2d edition, p. 60.

² *Political Economy*, Book III, chap. xv.

for if the value of an ounce of gold, e. g., has no existence as an independent magnitude and appears as something different as often as we change the object with which the gold is compared, how can the value of the ounce of gold either be measured or serve as a measure of other values?

It seems strange that a definition of value so devoid of content could have become so generally accepted by writers of text-books; and it is not surprising that economic writers have never been in the habit of confining their use of the term value to the meaning given in their definition.¹

While the earlier economists gave value an absolute meaning through its relation to labor sacrifice, recent economic theory escapes from the inane ratio concept upon the side of utility. Jevons says:²

"I have pointed out the excessive ambiguity of the word value, and the apparent impossibility of using it safely. When

¹ Cournot defines value as wholly relative, yet his treatment of the subject shows that his concept retains an absolute element.

"To sum up, there are only relative values; to seek for others is to fall into a contradiction with the very idea of value in exchange, which necessarily implies the idea of a ratio between two terms. But also an accomplished change in this ratio is a relative effect, which can and should be explained by absolute changes in the terms of the ratio. There are no absolute values, but there are movements of absolute rise and fall in values. Among the possible hypotheses on the absolute changes which produce the observed relative changes there are some which the general laws of probability indicate as most probable."—*Mathematical Principles of the Theory of Wealth*, p. 24.

Let us suppose that three pecks of wheat exchange for five pecks of corn. The fraction $\frac{3}{5}$ expresses the ratio of exchange between them. If later four pecks of wheat exchange for seven pecks of corn the new ratio will be $\frac{4}{7}$. Here is what Cournot calls a relative rise in the value of wheat in respect to corn, and Cournot submits that the rise is to be explained by an absolute change in the value of one or both of the articles compared. Perhaps the exchange of wheat with oats, wool, nails, apples, silver, and various other articles will show a relative rise in the value of wheat in respect to all of them; but, however extended our observation, we could find evidences of only a relative rise in the value of wheat in respect to the other goods. If values are nothing but relations in exchange, changes in value must all be relative. To speak of an absolute rise in the value of wheat implies that value is an absolute attribute capable of increase or decrease without regard to the value of other articles.

Grant that value is an attribute of things, such as importance for satisfying human wants, and we at once understand how the ratios of exchange vary with the variations in the absolute values of the articles exchanged. Cournot himself speaks of "the absolute value of the monetary metals" in the same chapter in which he says that there are no absolute values, and in his later works the term absolute value is repeatedly used.

² *Theory of Political Economy*, 3d edition, p. 162.

intended to express the mere fact of certain articles exchanging in a particular ratio, I have proposed to substitute the unequivocal expression—*ratio of exchange*. But I am inclined to believe that a ratio is not the meaning which most persons attach to the word value. There is a certain sense of esteem or desirableness, which we may have with regard to a thing apart from any distinct consciousness of the ratio in which it would exchange for other things. I may suggest that this distinct feeling of value is probably identical with the final degree of utility. While Adam Smith's often-quoted *value in use* is the total utility of a commodity to us, the *value in exchange* is defined by the *terminal utility*, the remaining desire which we or others have for possessing more."

The Austrian economists, whose enlightening analysis of value has modified the thought of every economist of the day, have essentially the same idea of value as that described by Jevons as the popular meaning of the term. Menger says, the value of goods is "the importance which concrete goods, or quantities of goods, receive for us from the fact that we are conscious of being dependent on our disposal over them for the satisfaction of our wants."¹

The primary idea in value is that of importance for the satisfaction of our wants. It is utility limited by the sacrifice of substitution.

Would an article in possession, if removed, be replaced without sacrifice, like the air in a closed room? The measure of its value is nothing. Would it be replaced at some sacrifice? Its value is gauged by the sacrifice. Would an imperfect substitute take its place? Its value is gauged by the two-fold sacrifice entailed.²

¹ Quoted by Wieser, *Natural Value*, p. 21. Prof. von Philippovich (*Grundriss der Politischen Oekonomie*, 2d edition, p. 6) says: "Der Werth der Güter ist die Bedeutung, die wir ihnen zuerkennen mit Rücksicht darauf, dass wir unsere Bedürfnisbefriedigung und daher unsere Wohlfahrt von ihnen abhängig wissen."

Prof. Marshall recognizes the subjective and absolute nature of value when he says (*Principles of Economics*, p. 208): "The more a person spends on anything the less power he retains of purchasing more of it or of other things, and the greater is the value of money to him."

² This illustration is taken from Professor Clark's *Philosophy of Wealth*, chap. 5, with the word *value* substituted for *effective utility*.

In these days of interdependence, when every one has in some way hired out his services to his neighbors while supplying his own wants by purchases with the money he gets, it is evident that the values of the most of our exchangeable commodities to us will correspond to the market prices of such commodities, for those prices represent the sacrifices which would be required to replace them. So important are market prices in determining values to individuals, that we very commonly use the word value to denote simply the amount of money which we would have to give for the object in view, or the amount of money for which it would sell.

The forces which influence merchants and other sellers in determining prices, and through prices the values of things to individuals, must be considered under the theory of prices, but our present concern is rather with the unit of value.

Our dependence upon the market for the supply of our wants makes the monetary unit an exceedingly convenient unit of value. (1) It is definite and familiar to all as the constant medium of exchange; (2) it is readily divided or multiplied to express any degree of value; and (3) it equates the personal element, and expresses values in terms adapted to the purpose of exchange.

To illustrate the last point, let us picture to ourselves a rich man, a poor man, and a pet dog. Perhaps the poor man would make a great sacrifice to keep the dog, while the rich man cares but little for it. That, however, is a personal valuation, and does not indicate which man will have the dog. But if the poor man considers it worth five dollars to him, while his more fortunate neighbor is ready to pay six dollars for it, the dog is pretty sure to fall to the rich man. The valuations in units of money are the terms from which the ratios of exchange are determined. Under the present social order the commodity goes to the one who will pay most for it, but, owing to the inequality among men, this is not always the one who wants it most.

The amount which I am willing to pay for a favorite picture depends not only upon the importance of the picture to me as a

source of gratification, but also upon the importance of a dollar to me.¹✧

When we speak of the value of a house, or of a cow, we usually refer to the number of dollars that it is worth, but we have no conception of its real value to the owner till we know his estimation of a dollar—the amount of pleasure or hardship that depends upon its possession.² Values always originate and derive both their meaning and their amount from such considerations of human well being, though the coloring is largely lost by expressing them in terms of dollars and cents. Back of all money values lie personal values, and money values cannot be explained till the nature and laws of personal values have been discovered.

But how may the value of the monetary unit to different individuals be revealed and measured? Two methods are contending for our acceptance, one looking to the utility of the dollar, the other to its cost. Suppose a man to spend his income, dollar by dollar, purchasing goods in the order of their importance to him. The utility of the last dollar's worth would determine the value of money to him, for that would be the satisfaction which the loss of any dollar would intercept. On the other hand, most people earn money, or at least save it, by fatiguing, or otherwise disagreeable labor. If they value a dollar highly

¹ "For the price which the various purchasers in a market will pay for a thing, is determined not solely by the final degrees of its utility to them, but by these in conjunction with the amounts of purchasing power severally at their disposal."—Marshall, *Principles of Economics*, 3d edition, p. 562.

² When we say that this article is worth two dollars and that article is worth five, we do not consider the fact that a dollar has a very different value to different people—nor do we deny the fact.

Values expressed in terms of the monetary unit are called objective values because the unit is objective. The values themselves are subjective and must vary in the same ratio that the unit varies when referred to different people.

Prof. Newcomb calls my attention to Laplace, who, in his introduction to the *Théorie Analytique des Probabilités*, 1814, sets forth the fact that the value of the franc increases as one's possessions decrease, so that the chance of losing a sum of money is not fully offset by an equal chance of gaining the sum.—Laplace, *Oeuvres*, Vol. vii, pp. xxi, xxii. Laplace refers to Daniel Bernouilli, also cited by Prof. Marshall, who considered that the relative values of an increment of wealth to different individuals would be indicated by the quotients obtained by dividing the increment by the amount of wealth possessed by each individual.

they will prolong their labor till it becomes decidedly burdensome, but if they place a low estimate upon the money earned they will stop when the sacrifice of continuing would be slight. One naturally works till the pleasure to be derived from the possession of another cent is just offset by the displeasure of earning it, and of course one values every cent in his possession at the same rate. The sacrifice involved in the earlier hours of labor does not indicate the value of the earnings, for a dime lost can be replaced only by extending the period of labor.

It is not easy to determine whether the importance of a dollar to its possessor is best revealed by referring to the additional satisfaction that it will give or to the displeasure which its possession will save. So far as people regulate their actions with reason the two methods would give equivalent results, for it is not reasonable to endure a hardship for money unless the money received will yield a satisfaction equal to the hardship, nor is it reasonable to shun a hardship until it has become equal to the additional pleasure to be derived from the money which it yields.

It may be claimed that the utility method is of more universal application than the cost method, for so far as labor sacrifice is concerned, many people have fixed incomes, fixed hours of labor, or fixed habits of life which interfere with the natural limitation of the period of labor and thus thwart the natural equivalence between the final labor sacrifice and the utility of the final earnings. The music teacher would be glad to give more lessons at the same rate per hour, and more calls would be acceptable to the physician. On the other hand, nearly everyone, either in his regular occupation or outside of it, is often called upon to decide whether the sacrifice involved in continuing work equals the utility of the money to be gained or saved; in other words, to decide whether it will pay to work any longer; and there is reason for the belief that sacrifice and hardship are more definite and capable of estimation than pleasures.¹

¹ Prof. Edgeworth and Prof. Böhm-Bawerk, in the *Economic Journal* (Sept. and Dec. 1894), discuss the question whether there is a general tendency for the market values of commodities to correspond to the final disutility of the labor which produces them. Both seem to agree that there is such a tendency to the extent "that the laborer is perfectly free both to change amongst the different occupa-

No attempt, I think, has ever been made to establish a unit of subjective pleasure, but on the side of hardships the labor unit has often been proposed. Apart from any special consideration of the burdensomeness of the last moments of a labor period, a day's labor, or an hour's labor, may be taken as a unit of sacrifice, though it is necessarily inaccurate. Let us return to the comparison of the rich with the poor man. Suppose them to be in equal physical condition and both caught in a storm at a distant station. If not moved by selfish considerations, you will as readily lend your umbrella to one as to the other. It will be an equal service to either. If, however, you wish to make money on your fortunate possession, the poor man may tell you that the use of the umbrella would not be worth twenty-five cents to him, though the rich man would be glad to use it even if you charged him two dollars for the favor. But if instead of money you should ask an hour's labor for the use of the umbrella the two men might be placed upon an equality again.

tions and to vary the length of the day's work," but the Austrian economist considers that there is not sufficient economic freedom to make this law of disutility-cost operative in any general way.

It does not appear that either author has the fact sufficiently in mind here, though I am sure the idea is not new to them, that the final disutility of labor is an individual matter, and may not be the same for any two workmen who produce the same commodity, though all receive the same pay for their final labor sacrifice. It is the individual's estimate of the final earnings that equals the individual's estimate of the final labor sacrifice at the moment when he chooses to stop work. If we wish to find one's estimate of money in terms of disutility where the length of the labor day is fixed by other considerations, we may look for it as well in his activity outside his regular employment.

It should be observed in this connection that there is no direct relationship between the final utility of hats, for instance, and the final disutility of the labor day on the part of the hatmakers. The equivalence is between the final disutility of the labor of each hatmaker and the final utility to him of the commodities which he can buy with his earnings. A hard working needle-woman prolongs her labor till its disutility approaches the limit of endurance, because the final utility to her of money and commodities is correspondingly high, but, unfortunately for her, she cannot impart this high scale of valuation to the product of her labor in the market.

Whatever tendency there may be for prices to conform to disutility cost, it is greatly and permanently disturbed by differences in economic opportunities. See an article entitled "Pain-cost and Opportunity-cost," *Quarterly Journal of Economics*, Jan., 1894; and an article by Prof. Böhm-Bawerk, on "The Ultimate Standard of Value," *Annals of the American Academy*, Sept. 1894.

But to the commercial world this personal unit of value is of less importance than the generalized unit which, like the dollar, will serve to measure, under a system of one price to all, the comparative value of different things to everyone, though it necessarily fails to indicate the relative values of the same thing to different people.

The monetary unit has a new significance when taken as the standard of deferred payments. We have found the dollar to represent very different values to different individuals, but while this is true it might be possible for the value of a dollar to remain constant from decade to decade when referred to people of a given economic condition; or, without any direct reference to its personal importance, the dollar might remain from decade to decade constant in its general purchasing power. In which case would the dollar be a just standard of deferred payment—which condition would give the honest dollar?

The progress of industrial development is constantly facilitating the production of commodities. Methods are being improved, new resources discovered, and organization is becoming more perfect. If the decrease in the cost and increase in the quantity of goods causes a fall in their personal values, ought the dollar also to fall in value and thus remain constant in purchasing power? Or if, on the contrary, the general social development, the increased variety of consumption, and the widening of the circle of wants, should increase the marginal cost, the marginal utility, and thus the personal valuation of commodities, ought the dollar also to rise in value and retain a constant power in exchange? Or would it be more just in either case for the monetary unit to remain constant in value, though its ratio to commodities might change?

It may be claimed with reason that the verdict of justice would depend largely upon the contract made between the debtor and creditor. The market rate of interest would be raised or lowered if the contracting parties expected the principal itself to fall or rise in value. A depreciating money unit would be balanced by a higher rate of interest, and the conditions of the contract should be fulfilled. On the other hand, it may be said that the future changes in the value of the mone-

tary unit are so uncertain that they are very imperfectly represented in the rate of interest upon long time loans.¹

The question involves many difficulties. Prof. E. A. Ross² says all agree "that economic justice consists in the exchange of equal values," though he himself abandons that position if marginal utility be accepted as the criterion of value; and the late Mr. L. S. Merriam³ said that "the justice of the debtor's repaying to the creditor a value equal to the value received need not to be defended, as it is seldom seriously assailed." Mr. Merriam adhered consistently to the final utility conception of value and regarded that as the ideal money which remains constant in final utility to society, so that the monetary unit should always represent the same amount of marginal utility or real importance for the well-being of society. Mr. Merriam admitted that such a constant unit is chimerical, yet as an ideal standard it is well to form a clear conception of its meaning.

What then is this final or marginal utility to society which seems to be the criterion of social value? If society, like an individual, should use its total income unit by unit in supplying first its most urgent wants and then those of less urgency in order, it is evident that the last units of income would have a utility which would represent the importance or value of each of the units of the income. Then the idea of value based upon the final utility to society would have a definite subjective meaning. But the problem is not so simple. Society does not satisfy the wants of her members in the order of their urgency, but is always partial to those members who can give most in return for her favors. We have noticed that, owing to differences in income and in wants, the marginal utility of a dollar to one man is far ahead of that to another man. While this is

¹ Prof. Irving Fisher (*Appreciation and Interest*, Publications of the American Economic Association, Vol. xi, No. 4) has considered this question most fully and shows by a statistical study that "rising and falling prices and wages are directly correlated with high and low rates of interest," but that "the adjustment of interest to price movements is inadequate."—p. 75.

See also Marshall, *Principles*, 3d edition, pp. 673, 674; J. B. Clark, *The Gold Standard in Recent Theory*, Political Science Quarterly, Sept. 1895; and Pareto, *Cours d' Economie Politique*, sections 116, 117, 387.

² *The Annals*, Oct., 1892.

³ *The Annals*, Jan., 1893.

so, marginal utility to society can hardly have any definite meaning.

When it is said that the value of a dollar to society should remain constant we may well ask: To what part of society? It is quite possible for its value to increase generally in respect to one class though remaining constant, or decreasing, to another class. In our efforts to regulate the value of the monetary unit should we consider the rich or the poor, the creditor or the debtor; or should we take a general average of all? If a general average is chosen, upon what principle should the average be made?

So far as I know, the only attempt to arrive at a subjective unit of value by a combination of all the individual standards is that of Professor Clark,¹ who considers "the pain suffered by society as a whole in the final periods of daily labor" as the ultimate unit of value.

It has now been over twenty years since Jevons and Menger set forth the relation of value to final utility, and writers upon economic theory have long been busy in formulating the laws of subjective value; but Professor Clark has taken the lead in deducing a subjective unit of exchange value. Let us therefore give somewhat detailed consideration to Professor Clark's conception.

In order to understand this conception of the unit of value we must remember that Professor Clark includes under the pain of the final period of labor not only the positive discomfort of the final labor of the day, but also the other sacrifices, such as foregoing the pleasures which continuing work prevents. Thus the pain of the final labor is supposed to equal the additional pleasure to be derived from the final earnings, and final disutility becomes equal to final utility at the point of time when one chooses to stop work.

Granting this equality, let us consider how this unit of "the pain suffered by society as a whole in the final periods of daily labor" is composed. Unfortunately Professor Clark is not clear upon this point. He expresses the unit as the sum obtained by adding together the personal disutility experienced

¹ The Ultimate Standard of Value, THE YALE REVIEW, Nov., 1892.

by each member of society at the point of time when he chooses to stop work, but when one attempts to give a definite meaning to the conception a question arises in regard to the character of the final increments of disutility. Shall they be for equal infinitesimals of time, or for equal infinitesimals of earnings? In other words, shall we add together the disutility which each one experiences from, say the last minute of the day's labor, or should we rather take the disutility involved in earning, say the last cent of the day's wages?

The former method would give a unit which would obviously be of little use as a standard of value. In the first place, we have no assurance that the sum of disutility would remain constant, for the development of the arts of production tends to lower the marginal disutility of labor, while the increased variety of consumption and the development of new wants tend to keep people at work till the marginal disutility is high. These two tendencies may or may not exactly offset each other. If they do not, the standard of value is not constant. In the second place, there is practically no means of comparing such a unit of value with the monetary unit, so long as the final minute of labor represents very different earnings for different persons.

Professor Clark says, "The price of things corresponds to the pain of acquisition, of which the unit is the sacrifice entailed on society by the work of the final minute in each of a series of days." So long as one man can earn a dollar in the final minute of the day's labor while for another man the final minutes of three hundred days are required, how can we determine the relation between a dollar and this final minute disutility to society in general?

If we could add together the earnings of every member of society for the final minute of the day's work and divide by the number of members, an average would be reached which might be taken as an index of the relation between the monetary unit and the final increment of labor. Then if we could find the average disutility of the final minute of labor and compare this average disutility of final labor with the average earnings of the final labor, we could ascertain an average value of the monetary

unit.¹ But how can this average disutility of the final minute of labor be estimated or measured?

From this standpoint we see the weakness of Professor Clark's unit, if we propose to use it practically as a standard of value.² We still have no unit of disutility in terms of which we can say that this man's final minute of labor costs him three units while this other man suffers four units. Without some means of measuring and comparing these subjective disutilities it is impossible to determine the average disutility of final labor, which, in turn, is a requisite for determining the average subjective value of a dollar.

But instead of taking the final increments of labor for equal increments of time, let us see if a better result can be reached by considering the disutility involved in securing the last increment of the day's earnings. Our unit of personal disutility will be that of earning the last cent rather than that of working the last minute. If we could add these final disutilities as experienced by each member of society respectively, and divide by the number of members, we should at once arrive at the average value of a cent to society.

But here again we meet with the difficulty of expressing the subjective feelings of different people in terms of a common subjective unit. We have no means of adding these disutilities because other people have no means of accurately telling us the amount of disutility which they experience. It may be said, however, that this practical difficulty of measurement need not interfere with a purely theoretical study. We should first determine what the true unit of value would be and then meet the obstacles to its attainment as best we can. Let us consider then whether this second method of averaging final labor sacri-

¹ Should this average value of a dollar remain constant it might still be an unjust standard of deferred payments, because in forming the average according to the above method a wealthy man has more weight than a poor man.

Should a hundred railway presidents double the money earnings of their final labor, the average value of a dollar as obtained above would decrease much more than when a hundred switchmen doubled their final earnings. The greater weight of large incomes in determining the average earnings of the final minute of labor is not fully compensated by the greater weight of the poorly paid labor in determining the average disutility of the final labor.

² It should be said that Prof. Clark does not indicate that his unit of value was designed for such use.

fice would give us a true standard of value if the indicated computations could be made.

Let us grant that the disutility experienced at the time one chooses to stop work is a true index of his valuation of the earnings, and is equal to the final utility of the earnings. Then add together the disutilities experienced by all the members of a society in attaining the last cent of their daily earnings. Multiply this sum by one hundred, and divide by the number of the members in the society. The result will be the average value of one dollar to the people involved. If similar calculations made in succeeding years and decades gave the same average disutility, we could say that the average value of a dollar had not changed. Would this then be the ultimate standard of social value? Would it also be the just standard of deferred payments?¹

To the former question an affirmative answer seems necessary, for inasmuch as the value of a dollar must vary with the individual we can only take an average to represent the value to society as a whole; and when the average is taken according to this method, any change in the value of a dollar to one person will affect the result just as much as an equal change on the part of any other member of society, whether rich or poor.²

¹ Léon Walras (*Éléments d'Économie Politique Pure*, 2d edition, p. 125) proposes to take the arithmetic mean of the marginal utilities of an object to the different members of a society to represent the marginal utility of the object to the society, but (p. 432) instead of having this average marginal utility of the standard of value remain constant, he would have it rise or fall with the marginal utilities of other commodities, so that average prices would remain constant.

Walras' successor at Lausanne, Prof. Pareto (*Cours d'Économie Politique*, sec. 386), prefers to take the harmonic mean of the marginal utilities of gold to each individual to represent the marginal utility of gold to society, but (sec. 390) he does not recognize that the best interests of society require either that average prices or the average marginal utility of money should remain constant.

² Let society be represented by ten men of whom two have incomes of \$10 a day, three have incomes of \$5 and five have incomes of \$2 a day. Eliminating personal differences, we may assume roughly that each man's estimate of money will be represented by the reciprocal of his income, and $\frac{1}{10} + \frac{1}{10} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$ divided by 10, or the fraction $\frac{88}{1000}$, represents the average valuation of a cent. These fractions may represent the time required by the respective individuals to earn a cent, or if you please, they may represent the number of groans which a cent would offset. Now it is evident that a change of a second of labor time or of one groan in the estimation of the cent on the part of one of these individuals will have the same effect upon the average valuation that an equal change on the part of any other of the individuals will make.

The question in regard to a just standard of deferred payments is not so easily answered. When one rich man accommodates another with the loan of a hundred dollars, the sum is of little account to either; but if, while the debt is unpaid, both men become poor the hundred dollars comes to embody a much greater value to both men, and, from the standpoint of personal value and sacrifice, the repayment of five or ten dollars might justly cancel the original obligation. But if, for instance, the creditor has grown richer while the debtor has become poor, such an equalization would be impossible. Either one man would be obliged to repay more (in personal value) than he had received, or the other would have to accept much less than he had parted with. The dollar which has increased in value to one has decreased in value to the other.

In cases where the relative economic condition of the contracting parties has changed while a debt is standing, there seems to be no way of attaining ideal justice; and expediency doubtless justifies the present custom of holding a debtor, except in cases of bankruptcy, to the payment of the same number of dollars which he has borrowed, irrespective of their importance to either party.¹

No attempt is made to adjust debts to the personal standard of the individual, but the attempt is often made so to regulate the currency that the dollar may embody a constant amount of value to society in general. Much of the discussion of the currency question would be less vain if the disputants had a clear conception of what is meant by constant value. Relying upon the definitions of value as the ratio of exchange, or power in exchange, many writers have taken the ground that constant value to society would mean constant purchasing power, but the rapid progress of industrial development is making so great changes in man's relation to commodities that the theorist is

¹ In fact, as Prof. Fisher observes (*loc. cit.* p. 90), "the phenomenon of borrowing and lending is to some extent itself a consequence of the different degrees in which money appreciates or depreciates to borrower or lender." A person who expects to need money in the future more than now, lends to one whose greater need is present. The exchange is profitable to both parties on account of the unlike changes in the subjective values of money to them. The undeserved losses in transactions of debt and credit, as in other lines of business, come from the value changes which cannot be foreseen.

turning naturally to the deeper significance of value. It is found to be subjective in its nature, and evidently the ultimate standard of value must be a subjective standard.¹

The principle of marginal utility, as measured in terms of personal gratification or in terms of the disutility of final labor sacrifice, gives us the rule for measuring values upon the part of the individual, and the modern conception of society as the social organism has led to the application of the same principle to the determination of social values, and the expressions "final utility to society" and "final labor sacrifice of society" are brought into economic literature.

When all values are expressed in terms of the unit of exchange, this principle of final or marginal utility is, doubtless, the chief force in the determination of prices and must figure largely in the theory of prices.² But, as we have already seen, when we attempt to ascertain the real value of the monetary unit itself, we find that the conception of a final utility to society will not bear inspection. The final utility of the dollar or the cent varies with each individual. To represent its value to society as a whole, we must be contented with an average.

Then the question arises whether this average value of a dollar should remain constant in order to make it the best possible standard of deferred payment. Contrary to the views commonly expressed, I would question whether, from the standpoint of social welfare, a unit of constant average value would be the ideal standard of deferred payment. Suppose a few members of a community to grow very rich, so that the

¹ Walras (pp. 463, 464) proves mathematically the evident truth that the mean of the variations of prices does not indicate the variation in the value of money, but the relation between the variation in the value of money and the mean of the variations in the values of commodities. See also, Pareto (*loc. cit.* sec. 389). This is the fundamental error in the numerous methods of measuring variations in the value of the monetary unit by averaging prices through index numbers. Investigations through index numbers are very useful in determining the course of general movements in prices. They show changes in the relationship of money to commodities, but do not show the absolute changes in the value of either money or commodities.

² A commodity always goes to the one who will pay most for it. So the price of anything does not depend upon what would be its marginal subjective utility to society, its natural value as Wieser would say, but upon the smallest offers that can be satisfied with the available supply.

dollar represents much less value to them than formerly; in that case ought the coinage to be restricted, or some other means be resorted to for increasing the value of a dollar to other people enough to keep the average constant? We see at once that this would work injustice to the debtor class. We do not think it unjust if the dollar represents somewhat less toil and anxiety now than it did a few decades ago.

Of course fluctuations in the value of currency are pernicious, and a sudden detraction from its value would be robbery, but it may well be questioned whether the natural depreciation which comes from industrial progress is not more in keeping with justice and social welfare than a more strictly constant unit of value would be. President Walker has noticed that a gradually increasing currency is conducive to prosperity, and Professor Ross presents strong reasons for the claim that the debtor rather than the creditor class should reap the benefit of industrial progress. Of course the debtor whose economic standing has fallen would still suffer hardship in paying his debt. That is one of the punishments which society imposes upon the unsuccessful. But the debtor whose economic standing has remained stationary would not be obliged to pay back more in personal value than he had received on account of the success of other members of society.¹ If society were in a static condition, the best standard of deferred payment would doubtless be a unit whose average subjective value remained constant, but in a progressive society a slightly depreciating standard seems just as fair, and we may at least conclude that the subject of a just standard of deferred payments would not be entirely settled by the determination of a perfectly constant unit of average subjective value.²

¹ Prof. Clark says (*Political Science Quarterly*, Sept. 1895, p. 398): "If a unit of currency conforms to the amount of commodity secured by a day of labor it will be an ideally right one; for it will divide equally between debtor and creditor the gains that come through industrial progress."

This proposition supposes the working day to grow shorter and less burdensome, while its product increases.

² As the social estimate of a dollar must be an average of individual estimates, so the standard of deferred payment must be of constant value or otherwise according to an average of individual estimations. It might seem therefore that justice would require a standard of constant average value, not to society as

Inasmuch as the average subjective value of a dollar cannot be exactly determined on account of the difficulty in measuring or comparing the feelings of different people, it becomes necessary to judge of value movements by such external signs as are available.

Adam Smith regarded the quantity of labor which is willingly given for anything as a true measure of its value. He speaks of labor as "the only universal as well as the only accurate measure of value, or the only standard by which we can compare the values of different commodities at all times and at all places."¹

This statement has been much abused by economists who have not understood it, and it cannot be understood by any one who looks upon value from the standpoint of commodities. There is no constant relation between labor and commodities, but the relation between labor and personal sacrifice is perhaps as constant as any of the quantitative relations which we find in our ever-changing economic life.

a whole, but to those individuals who are concerned in debts and credits, and that in forming the average, each man's personal estimate of a dollar should be weighed by the number of dollars which he has at stake in debts and credits.

Compared with such a standard, we cannot doubt that the value of gold is depreciating, although the complaints against the gold standard are made altogether on behalf of the debtors.

After all, the question whether the commercial standard of value is really appreciating, depreciating, or constant in value is of far less importance than the requirement that its value should be free from fluctuations and uncertainties. A steady movement, whether upward or downward in the value of the money unit, will be adjusted in the credit contract, but uncertainty in regard to the standard causes risks and results in loss to both debtors and creditors.

Prof. Frank Fetter, in an article upon this subject in the *Annals of the American Academy* for May, 1895, says that the question of a just standard of deferred payment "has not received and is not likely to receive a positive answer from pure economic theory."

¹ Prof. Sidgwick, in his "Scope and Method of Economic Science," quotes this passage, though incorrectly, and asserts that "a tyro can now see the fallacy of Adam Smith's statement."

It is true that labor is hardly a practicable measure of the objective exchange value which Prof. Sidgwick has in mind, but even for exchange value the statement is not altogether fallacious if, as Adam Smith proposed, "the different degrees of hardships endured and of ingenuity exercised be taken into account." For what better criterion of the exchange value of an object can we have than the services which the object will command?

In regarding labor as a perfect measure of value, Adam Smith was doubtless wrong, whether the subjective or the objective standpoint be taken. Viewed from the subjective standpoint, quantity of labor could be so defined as to be equivalent to quantity of sacrifice, but as we have seen, it is not the total sacrifice of labor, but the marginal sacrifice, which corresponds to the marginal utility and value of the earnings.¹

Among the tangible signs of changes in the value of the monetary unit an important place must doubtless be given to price movements as indicated by the use of index numbers, but it must be remembered that while a general movement in prices may indicate a change in the value of money it does not necessarily constitute such a change. A price is but a ratio between two values and will be equally affected by a change in either term and both values may change without affecting the ratio.

Doubtless an index number could be so made up as to be a much better criterion of the importance to men of a dollar's worth of goods, but this desideratum has hitherto received comparatively little attention.²

¹ The sluggish negro basking in a southern climate values the dollar less than the energetic artisan, though labor on the whole is more irksome to him. The artisan, however, continues work till its final disutility to him is greater.

² A vague idea of this sort seems to underlie the choice of the consumption standard or the income standard instead of a more general system of prices. See Prof. Edgeworth "On Variations in the Value of the Monetary Standard," *Report of the British Association for the Advancement of Science*, 1889, and the article on "Index Numbers" in *Palgrave's Dictionary*. A nearer approach was made by Prof. Marshall (quoted by Prof. Edgeworth, *loc. cit.*), when he spoke of "the real value of gold" as measured by its power "of purchasing labor of all kinds—that is, not only manual labor, but the labor of business men and all those engaged in industry of any kind."

It is evidently with the subjective nature of value in mind that Prof. Newcomb, *Principles of Political Economy*, p. 210, says: "We might assume that the absolute value of everything produced by the population of the country remains unchanged except that as population increases the total value produced increases in the same ratio. In other words, we may suppose the average productiveness [in real value] of each individual to remain the same from year to year." Again Prof. Newcomb says, p. 213: "One source of error in drawing conclusions from such a table [a multiple standard table] can be more easily seen than avoided. The improvements constantly being made in manufactures lead to their being really cheaper when measured in terms of human labor, which is our proper ultimate standard. This improvement should be allowed for, if possible, by increasing the quantities in our standard collection."

The subjective standpoint has been maintained throughout the preceding discussion. The article has chiefly considered the nature and measurement of the value of the monetary unit. By a well-founded habit we express all values in our ordinary economic life in terms of the monetary unit. The explanation of the way in which these different money values come to be assigned to different commodities belongs to the theory of prices, and cannot be considered here. But before we can know the significance of a price or value as ordinarily expressed, we must know the value of the monetary unit. All other values are expressed in dollars and cents. If we can find the value of a dollar by referring to its subjective importance, we have the key to the whole system.

We find the subjective importance of a dollar varies with one's wants and economic condition, and, to each individual, is determined by the marginal utility of his money to him, or—what amounts to the same thing—by the disutility of earning money at the point of time when that disutility is just offset by the utility of the earnings.

We find that the wants of the different members of society are not satisfied in the order of their urgency, and, therefore, properly speaking, there can be no such thing as a final degree of utility to society as a whole. It appears, therefore, that the value of the dollar to society can be but an average of its values to the individuals who compose the society.

If the average value of a dollar is to remain constant, the average of its final utility to different members of society must remain constant, or, what amounts to the same thing, the average disutility of earning a cent at the point of time when that disutility is just balanced by the utility of the cent must remain constant.

However, there is reason to doubt whether a unit of such constant average subjective value would be the best standard of deferred payments.

On account of our inability to accurately measure the subjective feelings of other people, our main reliance must be upon a careful use of the labor standard for comparing the subjective value of the monetary unit to different individuals and to different generations.

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THE COIN SHILLING OF MASSACHUSETTS BAY.

II.

We must now turn our attention, for a moment, to the English currency of the latter part of the seventeenth century, since the relation of the colonial currency to it was of the first importance to the colonial.

After 1660, the misrating of gold and silver in England led to the clipping and export of silver, and a gold currency for that country. By 1695, the current silver coin was clipped down nearly to one-half its due weight.¹ Hammered coins were still in circulation, and it took repeated acts of legislation in the following years to put an end to them. A recoinage took place, in 1696, but the misrating of the guinea (it was to be 22s. after April 10, 1696)² still caused exportation of the silver coins. This was a protection to the Colonies, to a certain extent, against an exportation of their silver. Guineas were worth about 20½ shillings of legal weight and fineness each, but were rated at 22 shillings. Taking a piece of eight as equivalent to 4½s., 4⁵/₉ pieces were equal to a guinea, but it took 4⁸/₉ pieces to pay a guinea. Therefore they were clipped or melted. Copper coins were also issued to excess, 1699 to 1701.³ Since, then, we find the silver coins of England down to 7s. per oz. just before the recoinage, and Massachusetts silver at 7s. per oz. by the law of 1697, the silver shillings of the two countries were, at that juncture, equal; the depreciation of the silver currencies in the two countries was the same. But the money of account of England was guineas, rated, in 1696, at 22s. each. The ratio of the metals was probably 15 to 1 or 14½ to 1, as Sir Isaac Newton found it in 1717.⁴ Soetbeer's figures for the Hamburg market are: 1696, 15 to 1; 1700, 14.81 to 1; 1701-10, average, 15.27 to 1. At 15 to 1, the guinea was worth 20.711s. Only gold was brought to the mint. In 1696, the mint was closed against gold for nine months in an effort to turn the tide.⁵ The current shilling of

¹ Lowndes, *Silver Coins*, 87, 107. ² According to 7 and 8 Wm. III, c. xix.

³ Montagu, *Copper, Tin and Bronze Coinage*, 76.

⁴ 7 *Parl. Hist.*, 526.

⁵ 2 Ruding, 46.

account in England was, therefore, one twenty-second of a guinea, 5.88/5.39 grains. In the last years of the century the guinea was rated, by the usage of the market, at 21s. 6d. A shilling was then 6.02/5.51 grains. In 1717, by royal Proclamation, the guinea was rated at 21s.; a shilling was 6.163/5.65. The guinea shilling, as it existed from 1700 to 1717, was equal, at 15 to 1, to 89.3 grains sterling silver; at 15¼ to 1, to 90.8 grains. In all operations of exchange, American silver money had to be compared with English gold money, or with this silver shilling, which, at the market rate, was the equivalent of it. To this then, we must return below, but now we can see that it was the universal degradation of the silver coin, and its unequal degradation in different places, which led to the numerous projects of reform put forward in the first years of the century, most of which emanated from the Colonies, and were in their interest, but were received with serious attention in England, amongst which was a project for a colonial mint. This agitation led to the Queen's Proclamation of 1704.

Sir Isaac Newton attended the Board of Trade, May 23, 1704, to answer questions about the value of foreign coins. He said that the table of values¹ which he submitted was not intended to be published in the Proclamation, but was a guide for fixing ratings in the Plantations. He promised to compute the ratings of the different coins in proportion to the Seville piece of eight. On June 23d, he submitted such computations, but the Proclamation was dated June 18.²

It was prescribed in the document that a 17½ pennyweight piece of eight, worth 4s. 6d. sterling, should be six shillings colonial. This prescription admitted of three interpretations. (1) A 17½ pennyweight coin, if worth 4s. 6d. sterling, would not be .925 fine, but .920.833. It was assumed, however, in the colonies that "Spanish plate" was of sterling alloy. If 17½ pennyweights, assumed sterling, was six shillings, one shilling colonial was 70 grains sterling, but there was no coin corresponding to that or its multiples. Weighing and assaying must have been constantly repeated. (2) A coin of sterling

¹ This cannot be the table which is printed, 23 *Gentleman's Mag.*, 6 (1753), in which reference is made to the "late Emperor Leopold," who died in May, 1705.

² 17 *Board of Trade Journals*, sub dates.

alloy worth 4s. 6d. sterling would weigh 418.06/386.7 grains, and a colonial shilling, if deduced from this stipulation, would be 69.676/64.45 grains. There was no coin corresponding to this. In calculations it could be conveniently employed, since it meant that colonial was three-fourths of sterling. (3) The easiest interpretation, and the one which became popular, was that a piece of eight was six shillings. This left the definition of a shilling at the mercy of the fidelity and accuracy of the Spanish mints. The Proclamation therefore simply added new elements of confusion and complication. On the first interpretation silver was 6s. 10.28d. per ounce; sterling par 132.71. On the second, silver was 6s. 10.65d. per ounce; sterling par 133 $\frac{1}{3}$. On the third, the values were changing from time to time.

Queen Anne's Proclamation of June 18, 1704, was received in Boston in November. Its leading motive was stated in the document itself to be to remedy the inconveniences arising from the different rating of coins in the Colonies "by the indirect practice of drawing the money from one Plantation to another."¹ But few in Europe or America were then emancipated from the notion which here finds expression, that one state could draw coins from another by rating them at a greater number of shillings, livres, kreutzer, etc.² The Proclamation rated silver coins only. An attempt was made, in Massachusetts, to pass a law which should enforce it, yet not overthrow the existing system established by the law of 1697; but this was impossible. The Council wanted to comply with the Proclamation; the House wanted to maintain the Massachusetts usage. Hence no act could be passed, but, March 3, 1704-5, a Resolution was adopted that the matter should be regulated by a Proclamation of the Governor. As to the terms of this, however, the same dispute arose. It was proposed that coins of full weight should circulate on the terms of the Queen's Proclamation, and that all deficient coins should be rated by weight at 7s. per ounce. This would have made two inconsistent rates in the same document, for the rates of the Queen's Proclamation were 6s. 10.65d. per ounce, and the clipped bits

¹ Cf. Chalmers, *Currency*, 13.

² *Ibid.*, 7.

would have been the only currency, all the more seeing that they were not of sterling alloy. It was at last agreed that, until May, bits should pass at the rate of the Queen's Proclamation, but the Governor's Proclamation, as published, says that full weight coins shall circulate at "due weight according to Her Majesty's Proclamation and the laws of this Province," thus really embodying the contradiction. In the following June, a committee was appointed by the Council to "report what they shall think proper to be done by this Court [for the annexing of penalties on such as shall offer money by tale under due weight, and further for the reforming of the money]." The House amended by striking out the words in brackets and substituting: "for the reforming of the money and rendering the law effectual to prevent the debasing thereof." The committee recommended that the Governor's Proclamation should be approved and reiterated without limitation of time, "saving all past particular contracts," and that skilled persons should be employed to make a table of "proportion of coins and silver of sterling alloy by the oz. troy to the weight of a penny." The Council added that, except for special contracts, if the debtor offered bills of credit, "all process in the law shall be stayed against every such debtor by the space of twelve months, and then proceed."¹ No action was taken, for it would have been necessary to agree on the weight of a penny, and the same old effort to say that the same quantity was at the same time both 3 and 4 would have been renewed. There the legislative action ended, and the Queen's Proclamation never was enforced or obeyed. Governor Dudley, reporting to the Board of Trade, 1705, referred back to the law of 1697 which made 17 pennyweights to be 6 shillings, and said that it was "pretty well observed, so that I thought I had little to do, only, in obedience to Her Majesty's Proclamation, to add the half-penny" [weight], *i. e.* to make the 17½ pennyweight piece of eight to be 6 shillings instead of the 17 pennyweight piece. He called on the Court to enforce the Queen's Proclamation, but "could not obtain so much as a committee upon that affair until I would leave out the word 'penalties.'" The Court passed a tax at eight shillings per oz.

¹ Crosby, 121 ; 8 *Acts and Resolves*, 110, 118, 471.

[which is proof that the real current rate in 1705 was not higher.] He refused his assent, and there was a deadlock for five weeks. Then they granted the tax at 17 pennyweights for six shillings, but would do nothing to enforce the Proclamation or to lay a penalty for the violation of it, "and thereby the country will be emboldened to use *their late way of payment at 15 pennyweights* [8s. per ounce], though I shall take care that the courts and officers of receipt keep steady and allow of no legal payment but by due weight."¹ Here is explicit testimony that, by 1705, the current shilling of the market was down to 60 grains; metallic par with sterling silver coin, 155. The clipping had gone on with great rapidity since 1697. In eight years it had raised silver one shilling per ounce, i. e. the silver money of account had depreciated $12\frac{1}{2}$ per cent.

In fact it had depreciated more than this. This was only the officially acknowledged depreciation. At Boston, as at New York (where it was worse), or at Philadelphia (where it was still worse), the circulating medium in the market was fragments of Spanish coin. In November, 1705, Keeling got judgment against Lillie for £294. Lillie tendered to him 5625 *reals* in a bag, being quarters and eighths of a dollar, by tale, at 8 pence per *real*; total, £187 1s. [Even at 8 shillings per ounce, or a 15 pennyweight dollar for 6s., the *real* should have been 9d. Inasmuch as the defendant tendered *reals* at 8d. it is evident that the bits in the market were worn and clipped even below the rating of 8s. per oz., by at least 11 per cent. From other data given below we can deduce that a payment in them would render only 328 grains for a dollar, six shillings; or $54\frac{2}{3}$ grains for a shilling; rate, 8s. $9\frac{3}{8}$ d. per oz.] Lillie tendered for the rest of the debt full coins at 6s. for 17 pennyweights, which were accepted, although 2.86 per cent. below Proclamation. The sheriff objected to the *reals* that some were Peruvian and some clipped [so that they were even below the above calculation], and he took the order of the court, which was that the mass should be weighed and valued at 6s. for 17 pennyweights. It proved deficient £17 18s. 6d. or nearly ten per cent., which the defendant was compelled to pay. He appealed

¹ 1 *Prov. Laws*, 579; 4 *Doc. Coll. Hist., N. Y.*, 1131.

to the Legislature by petition, and the House resolved that "*reals* at 8d., qualified as the law directs [unclipped and sterling], are a legal tender to pass by tale, which are to be judged by the eye and not by the scale, the law assigning no weight to them." [There was no law about them.] The House further desired, if in any way practicable, to undo the transaction dictated by the Court. The Council took no action.¹

We may now recapitulate the definitions of the coin shilling, including the interpretations of the Proclamation, of which the first rating of 1705 would fall under the third.

	Silver per oz.	Shilling.	Sterling par in silver.	
1652.....	6s. 8d.	72 grs. sterling.	129	
1697.....	7s. 0.7d.	68	136.6	
1704.....	1) 6s. 10.28d.	70	132.71	} Proclamation Current dollars at 6s.
1704.....	2) 6s. 10.65d.	69.677	133.33	
1705.....	3) 8s.	60	155	
1705.....	8s. 9¾d.	54¾	170	

The reasons for the failure of the Proclamation are here evident. The actual money of account was at most the first rating under 1705. The Proclamation would have raised it one-sixth. Yet everything goes to show that, if the standard had been set at sterling, especially with a mint, and with a provision that 52 new shillings should pay 96 shillings of outstanding debts, the reform would have succeeded. Public feeling was favorable to a real or well-planned reform.

As we saw, above, the English gold shilling in 1704 was equal, at 15 to 1, to 89.3 grains sterling silver; at 15¼ to 1, to 90.8 grains. Against the former of these the 60 grain Massachusetts shilling gave a metallic par of 148.8; against the latter, of 151.3. Any depreciation of the bills of credit must be reckoned from this par as a base. Douglass² quotes exchange at 150 when silver was at 8s. per oz., that is, at eight of the then current silver shillings. The bills of credit read: "This bill shall be equal to money." What was money? It was this coin shilling whose variations we have been studying. The bills

¹ 8 *Acts and Resolves*, 595.

² 1 *Summary*, 494. Cf. Davis, 33 *Proc. Amer. Acad. of Arts and Sci.*, 208. Dr. Belknap's table of depreciation for New Hampshire gives, as the price of silver: 1700, 10s.; 1704, 7s.; 1705, 10s.; 1710, 8s.; 1711 8s. 4d.; 1712, 8s. 6d. (5 *N. H. Hist. Soc. Coll.*, 258.)

showed no depreciation until 1712, because the metallic shilling was depreciating, between 1690 and 1712, from 68 grains to 60 grains. Then more of them were needed, so that paper could depreciate $12\frac{1}{2}$ per cent. from its point of departure before it showed any depreciation at all.

The courts of Massachusetts, in 1708, "chancered" silver at 8s. per oz. in the settlement of debts. This rate was the standard of justice, truth and right in New England and New York behind the paper inflation of the next thirty years.¹ Under it a shilling was 60/55.5 grains.

In the evolution of the paper-money system in Massachusetts, the point was reached, in 1736, at which bills of a "new tenor" were issued. A bill of so many shillings was not now declared on its face to be "equal in value to money," but equal in value to such a weight of silver (at the rate of 20s. for 3 oz.), or to gold coin at the rate of £4 18s. per oz. The specification by tale having been abused until it was no longer available (no one knew what "money" was), recourse was had to a specification by weight, and the specification employed was the pine-tree rate, not proclamation, although the former was nearly three per cent. higher than the latter. The silver shilling was once more 72/66.6 grains. The gold shilling under the Act was 4.89/4.489 grains. The ratio is 14.84 to 1. Soetbeer gives the ratio for Hamburg, at this time, as 15 to 1 and silver rose for the next ten years. Probably silver was higher in America than in Western Europe, being preferred. The rate may have been taken from the market.

In 1728 "milled" dollars began to be made at the Spanish mints in America. By law they should have weighed 417.65/382.5 grains each, fineness being now, by law, .916.66. A test, in 1765,² showed that they contained only 377.4 grains fine. It is not probable that they were as bad as that immediately after 1728, but when they reached that point, each was equal to a sterling coin 408/377.4 grains. The intention in adopting the "new tenor" was to go back to "lawful money," which would be proclamation. Why they revived the pine-tree rate, and so multiplied confusion, is inexplicable. In practice,

¹ 4 *Doc. Col. Hist., N. Y.*, 1134.

² Chalmers, *Colonial Currencies*, 409.

proclamation, or lawful, money always meant a piece of eight for six shillings. The new "milled" dollars came to be specified as the standard of this "lawful money," at the same time that the pine-tree rate was specified also, although a shilling by the latter was 72/66.6 grains and by the former 68/62.9 grains, if we adopt the mint test as the true description of the dollars in circulation. Now appears, however, the interesting and important fact, of which anticipatory mention was made above, that, as a result of these illogical proceedings and the false work of the Spanish mints, the coin shilling had once more come to be, what it was by the law of 1697, 62.9 grains of pure silver.

In 1744 the bills of credit were changed again by reducing by one-eighth the amount of silver and gold put for a given number of shillings. Against 20s. was set $2\frac{2}{3}$ ounces of silver, or gold at the rate of £5 10s. 3d. This was 7s. 6d. per oz. for silver. The silver shilling was 64/59.2 grains, and the gold shilling 4.35/3.99 grains, ratio 14.837 to 1. This law left little trace upon the history, being swept away in the flood of depreciation which immediately followed.¹

At the resumption of specie payments, in 1749, it was enacted that the money of account should be silver at 6s. 8d. per oz., "and all Spanish milled pieces of eight of full weight shall be accounted, taken and paid at the rate of six shillings per piece." In order that these two stipulations should be equivalent, the piece of eight must have weighed 432 grains of sterling alloy. No dollar ever had weighed so much and no dollar then existing was up to sterling standard. The first provision was therefore nullified by the second, for the only money of account would be the piece of eight. What then was, by weight and assay, the piece of eight which was current at that time and which was in fact and practice the thing referred to? We have noticed above the Spanish mint law of 1728, by which the piece of eight should have been 417.65/382.5, and the mint test of 1765 by which it contained only 377.4 grains fine. In the whole contemporary literature of the Colonies only two statements are to be found which testify what the piece of eight

¹ The new tenor of New Hampshire was then on a basis of 6s. 8d. per oz.; that of Mass. 7s. 6d.; that of R. I. 6s. 9d.; that of Conn. 8s.

was in fact, 1750-60.¹ (1) In the controversy of 1762,² Hutchinson said that a piece of eight weighed 417 grains. (2) In a law of Connecticut, of 1755,³ it is provided that bills of credit shall be redeemed at 58s. 8d. per oz. of silver or £42 per oz. of gold. The true ratio is 14.448 to 1; disregarding the difference in standard of the two metals, it is 14.318 to 1. After the bills were redeemed, this law ordained that a piece of eight should be six shillings and an ounce of gold £5. Using the ratio previously obtained, we can compute that the piece of eight they had in hand must have contained 381.427 grains of pure silver on the former ratio, or 377.995 on the latter. Inasmuch as the latter coincides more nearly with our other information, we accept it as more probably correct, *i. e.*, the Colonists disregarded the difference in fineness of the metals, and derived the ratio from the gross weights. The shilling which was one-sixth of a piece of eight containing 377.4 or 377.9 grains of pure silver would be 62.9 grains pure; 68 grains sterling; and the piece of eight corresponding to it would be just 17 pennyweights sterling alloy. Those which were current weighed 417 grains, but were of baser alloy. The investigation must be regarded as having reached a conclusive result. The silver shilling, derived from the piece of eight in the middle of the century, was 62.9 grains of fine silver, coinciding with the shilling which we have met with twice above.

The next step was the very important Act of 1750,⁴ the motive of which was the apprehension lest coins "might rise above their real value as proportionate to Spanish milled pieces of eight at six shillings." All the current gold and silver coins were rated by taking up again the rule that proclamation means that colonial is three-quarters of sterling. This was applied, however, not to the true metallic value of the coins in sterling, but to the current rating in London, which was inaccurate, being affected by the wear of guineas, the errors in the English rating of gold to silver, and the inconvenience of minute fractions. These errors were all taken over and some of them exaggerated by the rule adopted in Massachusetts. The piece

¹ Some were in circulation, in 1749, which weighed only 13½ pennyweights (1 Douglass, *Summary*, 358).

² See below.

³ 10 *Col. Rec.*, 337.

⁴ 3 *Acts and Resolves*, 494.

of eight which would have been six shillings colonial on this rule must have had 386.64 grains pure contents; shilling 64.44 grains pure. But we have just seen that the actual pieces of eight, current at six shillings, contained from 377.4 to 377.9 pure; shilling 62.9 grains. If one man paid with a piece of eight and another with an English shilling, the latter paid 16.392 pence for 16 pence by proportion. The shilling and crown must therefore "rise" to this rating and its multiple, or be clipped or exported. When the law rated them at 16d. and 6s. 8d. respectively, and tried to keep them down by a penalty for passing them at a higher rate, it only drove them out. The real motive of the law was apprehension that other coins would be raised, by the usage of the market, so that they *would* be proportionate to the piece of eight which was current at six shillings.

In regard to gold coins the effect was different. In 1762, Thatcher said that it was only by an "oversight" that gold was not mentioned in the Resumption Act, and he claimed that all the coins enumerated in the Act of 1750 were thereby made legal tender at the rating there set upon them. A guinea, 129.438/118.625, was rated at 28s. colonial; a pistole, 104/94.792 [Newton],¹ at 22s.; a johannes, 221.3/202.9 [Noback], at 48s.; a moidore, 166.75/151.5 ["as they come into England," Newton], at 36s. The colonial shilling in pure gold, derived from these coins, at the rating, would be, in guineas, 4.237 grains, in pistoles, 4.31;² in johannes, 4.226; in moidores, 4.209. These figures show why johannes and moidores are heard of as far more common in the circulation than guineas and pistoles. If the former two were worn or filed the advantage would be greater. This law was sooner or later imitated by the other New England Colonies, and the ratings established by it became customary throughout Anglo-America during the next twenty-five years.

¹ Newton found the pistoles one-half of a carat grain worse [.911.46], and the moidores one-quarter of a carat grain worse [.914].

² A full pistole was worth 16s. 9½d. sterling. Hence it was worth more than its rating compared with the others. For this reason when a sum was to be obtained, pistoles at the rating were sought. (1 *Conn. Hist. Soc. Coll.*, 285.) They were melted.

"Dollars" were the money of account in treasury bonds of 1750.¹ In those of 1752, the obligation was to pay in silver at 6s. 8d. per oz., or in gold at £5 1s. 7d.; ratio 15.38 to 1. Soetbeer's Hamburg rate, at the time, is 14½ to 1. This law stands entirely by itself. The bonds would have been paid in gold, but they were no doubt paid in current pieces of eight, as above, at six shillings each. At £5 1s. 7d. per oz. a shilling was 4.331 grains of pure gold, and this, against a silver shilling of 62.9 grains pure, would give a ratio of 14.52 to 1. In the treasury bonds of the following ten years the obligation was to pay at 6s. 8d. per oz. or in dollars at six shillings.

After 1758 subsidies were received from England, part of which were sent over in coin, for the most part in Spanish and Portuguese gold, because this was the cheapest discharge by the exchequer of the sums voted by Parliament. When dollars were sent they were reckoned by the ounce. Spanish and Portuguese gold coins were delivered by tale, with a minimum weight, at the current rating in England.² These gold coins were paid to the creditors of the Colony at the rates in the Act of 1750. Express mention is made by the agents of the Colonies of the care taken, and expense incurred, by them, to select full weight coins.³ As a consequence, it was stated, in 1762: "Gold is now become by far the greatest part of the medium of trade of this Province."⁴ The exportation of dollars became a subject of complaint.

In his message of 1761, the Governor called attention to the counterfeiting of treasury bonds, and also of coin, and he argued that these crimes flourished because the penalties were inadequate. By a legislative freak, the consideration of this subject led to the introduction of a bill to make gold a legal tender at the rates which had become customary since 1750. Inasmuch as the first proposition was to determine the minimum weight at which the coins might pass by tale at the rating, it is evident that they had lost weight. A struggle ensued between the Council and the House on the old paper money

¹ 3 *Acts and Resolves*, 531.

² 1 *Conn. Hist. Soc. Coll.*, 286; 4 *Acts and Resolves, Mass.*, 347.

³ Cf. 1 *Conn. Hist. Soc.*, 285.

⁴ 4 *Acts and Resolves*, 490.

lines, the latter (the "country party") trying to put the minimum low; the former (the "court party") trying to put it at the legal standard of the respective coins, or at the minimum at which the coins had been paid to the Colony in the subsidies.¹ The Act as passed, Feb. 8, 1762, limited the johannes to a minimum weight of 221 grains [202.59 pure], the half moidore to 83 grains [76 pure]; the guinea to 129 grains [118.25 pure]. Each of these would give a shilling of 4.22 grains of pure gold. As to guineas, the Bank and the Excise office, in London, in 1753, published a rule that they would not receive them if they had lost more than six grains, $4\frac{5}{8}$ per cent. Hence the best ones must have been down to this limit.² In 1773, a test of £3,500,000 in guineas, accepted just as they came by the Bank for the purpose of the test, showed a loss of nine per cent.³ Selected guineas sent over in 1760 showed a loss of 1.08 per cent. by tale as compared with weight, which would bring the guinea down to 127.61 grains.⁴ The silver coin of England had lost by clipping and wear one-sixth.⁵ The price of silver in 1761 was 5s. 9d., which shows a loss of 16 per cent. The Massachusetts Act of 1762 provided that, if any coin was below the minimum legal weight, it should nevertheless be a good tender at a reduction of two and a half pence for each grain which it had lost. There was a struggle between the two Houses over the attempt of the Council to insert the words, "express contracts to the contrary excepted." "As [these] words do not appear in the Act, and as the clause, omitted in the bill, relating to the entering up of judgments, appears in the Act, as well as the clause fixing the rate of gold, it would seem that the bill, after it had passed to be enacted, had been, in some manner, reconsidered and amended, sometime after its passage to be enacted in both Houses, and before it had been signed by the Governor, or received the seal, though no further record of this irregular proceeding has been preserved."⁶

While this bill was pending, a controversy arose between Oxenbridge Thatcher and Hutchinson about its justice and its

¹ 4 *Acts and Resolves*, 552, 556. ² Ruding, 79. ³ 34 *Jo. Ho. Comm.*, 734.

⁴ 4 *Acts and Resolves*, 541.

⁵ *Lord Liverpool to the King, ad init.*

⁶ 4 *Acts and Resolves*, 556, Ed. note.

effect.¹ Hutchinson proposed to rate the johannes at 46s. instead of 48s. He said that there had been no scarcity of silver after resumption, until the exchange with England turned against the Province; that then, "upon comparing the prices of the two metals here with their prices in England, it appeared that silver might be shipped to much greater advantage than gold"; that during the following twelve years, "by means of a variety of favorable circumstances," exchange had not been above par, little metal had been shipped, the divergence of the ratings in England and America had not been great, and no mischief had been experienced; that now abundance of money had led to luxury and large importations, silver was being exported, and so the question was raised again.²

Both disputants agreed that the latest quotations in London were, for gold (Portuguese), £4 os. 8d., and for silver 5s. 9d. [ratio 14.158 to 1]; that the par of exchange was at 120 although it had been formerly 133; that the standard in Massachusetts was 6s. 10d. per oz., or a milled piece of eight for six shillings; and Hutchinson said that the piece of eight weighed 417 grains. The last two statements are irreconcilable. The piece of eight would have to be .934.9 fine. Soetbeer's ratio for 1761 is 14.54 to 1; for 1762, 15.27 to 1. The arbitrary importation of gold into Massachusetts had no doubt lowered its value there relatively to silver, compared with former times. Without undertaking to judge what it may have been, we may be confident that the ratio 14.905 to 1, which resulted from a silver shilling of 62.9 grains fine, and a gold shilling of 4.22 grains fine, was unjust to silver in 1761, and would force its exportation when the exchange was adverse. It was impossible to make use of the small gold shilling and to keep silver too, when the supply of gold was ample. In practice, the form in which the question always presented itself was: How can a debt of a shilling sterling in England be most easily discharged? At £4 os. 8d. per oz. for Portuguese gold, a johannes of 221

¹ *Considerations on Lowering the Value of Gold Coins*, etc., and letters in the *Bost. Evg. Post*, Dec. 1761 and Jan. 1762.

² *Cf. 4 Acts and Resolves*, 559.

grains was the equivalent of 37.14s. sterling.¹ Exchange being taken at par, 120, this was worth 44s. 6.8d. col.; but the coin was rated at 48s. col. Eight dollars were also 48s. col. If each contained 377.4 grains pure, according to the result of our investigation above, they would sell at the quotation (5s. 9d. per oz.) for 39s. sterling, equivalent, with exchange at 120, to 46s. 9.6d. col. The dollars were therefore worth 4.77 per cent. more in exchange than the gold johannes, although the two were rated equal in Massachusetts. The latter would remain there; the former would be exported. Inasmuch as the dollars had been the money, a change to the johannes would drop the standard $4\frac{3}{4}$ per cent., as Hutchinson said, or would be like raising the rating of the dollar to 6s. 3d. or 6s. 4d., or silver to 7s. 4d. per oz. To bring the two metals to a point of indifference on the same ratio as in England, the johannes should have been rated at 45s. 10.68d. col.; hence Hutchinson proposed to rate it at 46s. But dollars at 6s. and other coins as in the law of 1750 had become customary. Taxes were made payable by the Act under discussion in the coins at those rates. On account of changes in the market for the metals which took place immediately afterwards, it appears that the effect of the law of 1762 was not so great as had been expected; in fact, not very important. The above calculation all depends on the quotations then last received from England, and they were affected by the badness of the English coinage. "Y. Z." thought it a "flurry," after which the rates would return to the former customary rates, 5s. 4d. for silver and £3 17s. 6d. for gold. This was a ratio of 14.66 to 1.² Connecticut, in March, 1761, "considering the extraordinary price that foreign coins now bear in England," rescinded a vote to order a subsidy payable to her to be sent over in specie, and ordered it deposited on interest that bills might be sold against it later.³ If silver fell, as Soetbeer's figures indicate, the case would be entirely

¹ Y. Z., in the *Post* of Jan. 11, 1762, reckons a johannes of 220 grains worth 44s. $4\frac{3}{4}$ d. [$4\frac{3}{8}$] col. This shows that the current coins were below 221 grains.

² (*Post*, Jan. 11, 1762.) There must have been a loss of interest by delay at the mint.

³ 11 *Conn. Col. Rec.*, 489.

changed. Hutchinson feared that pistareens would, at the next stage, be made legal tender at their current rate, 14 pence, although not worth probably over 8 pence. A quantity of them had been sent with the reimbursements, and they served the purpose of subsidiary coins by the side of the gold coins upon the modern single standard system.

The minimum weights for gold coins in the Act of 1762 were reasonably correct, and would have kept up the standard of the money of account, but the provision that deficiency should be allowed for at $2\frac{1}{2}$ pence per grain was incorrect and mischievous. It encouraged filing and clipping. At 4.22 grains of fine gold for one shilling, a grain of standard gold was worth 2.61 pence. Hence a deficient coin was legally rated higher in proportion than a perfect one. For instance: a johannes of 221 grains was equal to 35s. 10.2d. sterling and was rated at 36s. for current use in London. By the rule of the law of 1750, that colonial was three-fourths of sterling, this coin should have been 47s. 9.6d. col. It was rated at 48s. If it had lost 20 grains, it would pass for 43s. 10d. At the rate of the full coin, 201 grains would be worth 43s. 7.8d.

Attempts to find any quotations of commercial exchange on London at Boston in the middle of the 18th century have thus far proved fruitless. Gov. Belcher wrote, in 1734, "It is the hardest thing to be done in the New England world to procure bills for England."¹ There were no quotations in the modern sense. In the laws which were passed for selling bills to draw the subsidies from England, the minimum rates for 30-day bills were set as follows: 1761, 136; 1762, 138; 1763, 136; 1764, 135; 1765, 135. The par rate above cited, 120 at the end of 1761, was no doubt a commercial rate and also at 30 days sight. The divergence of the quotations is very remarkable. Freight and insurance on specie remittances we find reckoned at $4\frac{1}{2}$ per cent., in 1760.² Insurance rates, in 1756, were $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent.³ If we had quotations of sterling exchange and of the London prices of the metals for the period, they would be of the greatest value to us, as enabling us to make a final test

¹ VI. 7. *Mass. Hist. Soc. Coll.*, 57.

² 4 *Acts and Resolves*, 541.

³ 1 *Conn. Hist. Soc. Coll.*, 285.

of the results of our investigation. The best verification we can make is as follows: In regard to commercial bills, (1) when silver was at $5\frac{1}{3}$ gold shillings per oz., 62.9 grains of pure silver would be worth .755 of an English shilling and the exchange would be 132.3, metallic par. (2) When silver was at $5\frac{3}{4}$ gold shillings per oz. (the "rise" being due in part, at least, to deterioration of guineas), 62.9 grains of pure silver would be worth .814 of an English shilling, and the metallic par would be 122.8. We should expect the par rate for 30-day bills to be two or three points below these figures, and the ordinary extreme range of exchange would be about five points above and below that. As to public bills, we note that the rate was a minimum only, set in advance by law, and was not a market rate. We may be sure that bills sold in Massachusetts would be paid for in gold coins at the rating; one shilling not over 4.22 grains fine. If the bills were paid promptly and in full weight guineas, the exchange would be, at metallic par, 133.8. The data are so inadequate and uncertain that these calculations cannot be presented with confidence.

During the remainder of the time that the Province of Massachusetts Bay existed, the shilling was 4.22 grains of fine gold, subject to deterioration by the wear and abuse of the gold coins, or 62.9 grains of fine silver, subject to the deterioration of the Spanish dollar. The dollars coined after 1772 should have been, by Spanish law, $417.75/377.13$ grains.

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WORKMEN'S COMPENSATION ACTS.¹

FOR many years it has been one of the contentions of organized labor on the continent of Europe, that workmen should receive compensation for accidental injury as a matter of course. That is, they contend that it is the duty of the employer, from the standpoint of natural justice if not of positive law, to compensate his workmen for any loss or damage which may befall him in the course of his employment, and arising directly from his employment, whether such loss or damage be the fault of the employer or not. This doctrine, which has been year after year elaborately discussed in the various labor congresses which have been held in Europe, has been given the name of the "assumption of professional risk." This term "professional risk" has a wider meaning than the English legal expression "risk of employment" in that it covers not only the risk of employment, which may be interpreted dangers naturally and necessarily incident to one's occupation, but also all risks that are run when engaged in any occupation, though they may be common to all occupations. It is in the English sense one of the risks of employment of a railroad engineer that the flange of a driving wheel may suddenly break,

¹ The following are the principal sources from which the facts and law of this paper have been drawn.

Am. & Eng. Encycl. of Law, sub voc. Master & Servant.—Encyl. of The Laws of England, vol. 5, sub voc. Employers Liability Act.—Willes, Workmen's Compensation Act, 1897. Fourth Edition, London, 1898.—Hansard, Parliamentary Debates, 1897.—The Times Newspaper, May and August, 1897.—Journal of Comparative Legislation, June, 1897.—Journal of Jurisprudence, vol. 24, 1880, p. 170; vol. 28, 1884, p. 189; vol. 30, 1886, p. 250. *Bartonshill Coal Co. v. Reid*, 3 Macqueen, 282. *Lovejoy v. Boston & Lowell R. R. Co.*, 125 Mass. 79.—*Yeaton v. Boston & Lowell R. R. Co.*, 135 Mass. 418.—*Leary v. Boston & Albany*, 139 Mass. 580.—*Russell v. Tillotson*, 140 Mass. 201.—*Hickey v. Taaffe*, 105 N. Y. 26.—*Gottlieb v. N. Y., L. E. & W. R. Co.*, 100 N. Y. 462.—*Leonard v. Callins*, 70 N. Y. 90.

Revue du Droit Public & Science Politique, Sept.-Oct., 1898.—*Revue Politique et Parlementaire*, Sept., Oct. & Dec., 1897; February, 1898.—*La Réforme Sociale*, Oct., 1897.—E. Tarbouriech. *La Responsabilité des Accidents dont les Ouvriers sont Victimes dans leur Travail*, &c., Paris, 1896.—*L'Avenir Social*, No. 6. 2ⁿ Année.

resulting in his injury. It is not one of the risks of his employment, peculiarly so, that while he is cleaning his engine his fireman should inadvertently start it and he be injured. The Continental term, however, includes both of these.

Germany was the first government to embody this idea in legislation. Her example has been followed by other legislatures until at the present time seven nations have introduced this principle into their law. These seven nations, in the order in which they have come into line, are, Germany, Austria, Norway, Great Britain, Denmark, Italy and France. Germany's law dates from 1885. Austria's from 1890. In the other five states the legislation is either very recent, or, as with England, France and Italy, though on the statute books, it has yet to go into operation. In England the statute was passed in August, 1897, and went into operation on the first of July, 1898. Of course there are no figures or statistics of its operation yet to be obtained.

Four of the countries in question, Germany, Austria, Norway and Italy, have secured the workman his compensation for accident and injury by establishing systems of compulsory insurance. That is, the state compels the employer to insure the workmen up to certain amounts either by means of state insurance or mutual insurance. The other three countries, Great Britain, Denmark and France, establish with greater or less guarantee the workman's right to direct indemnity from his employer.

But these two great divisions give but an imperfect idea of the diversities and degrees of state intervention. In Germany the insurance is effected through mutual insurance corporations established by the employers and minutely regulated by law. In Austria there is a district establishment for insurance in each province, bringing together all the kinds of business subject to insurance, and managed by joint bureaus composed of workmen, employers and provincial magistrates. In Norway, the insurance is taken out through a national establishment covering the whole country, and guaranteed by the state. In Italy employers have the choice of insuring at a national accident bureau or of forming mutuals among themselves.

Of the countries where insurance is not compulsory, in France, if the employer does insure in mutual companies, or at premiums which are regulated by the state and in companies subject to state regulation, he frees himself from all further obligation toward his workmen. In England and Denmark the state does not guarantee to the injured party or his representatives the indemnity provided by the law in so absolute a manner. It does not put itself in the place of the bankrupt employer or insurer. But by compelling the payment of a capital sum in case of death or permanent incapacity it reduces the risks from the employer's bankruptcy to a minimum. In both Denmark and England also the workman has the resource of the common law always open to him; even if his employer does insure, the workman is free to reject the insurance and sue him in unliquidated damage.

Confining ourselves still to facts, before we give the reasons which have been urged in behalf of such a scheme, and before we consider what the introduction of such a principle means, in English law especially, it will be interesting to look at the results of the application of the insurance system in those two jurisdictions where it has been in operation for a term of years.

Let us take Germany first. The official declaration of the purposes of this insurance is this: "Imperial Obligatory Insurance, based upon the mutuality or autonomy of those interested, embraces without distinction of nationality all persons in Germany who work for wages; it gives to each insured in case of sickness and accident or invalidity or old age a legal right to a system of assistance clearly determined and collected without the expense of procedure." This statement may be true as regards what are termed sick benefits, but it is not true with regard to accidents or permanent disability. It has not been extended to farmers nor to the smaller forms of industry. It does not include the workmen in any establishment having less than ten employees, nor does it include the workmen of the Empire or of the different German states or of any Commune. No accident damages are given where the victim is not under treatment on the ninety-first day after the accident or has not before that time become permanently disabled or dead.

The last complete set of figures displaying the working of this system for Germany are for the year 1895. In this year 18,389,468 were insured, at a cost to the employers of 68,424,000 marks, or roughly, \$17,000,000.00. It cost one-fifth of this amount to administer the system. Twenty millions of marks more, or \$5,000,000.00, were assessed upon the employers for other purposes. The striking feature of this German system is the growth of the business of accidents, so to speak. In five years the number of persons in a thousand insured who met with an accident increased from 6.3 to 21.7. The indemnity paid for each person insured increased from 1.4 marks to 6.4 marks, and the tax on the employer for each person insured increased from 2.98 marks to 6.86 marks. The German figures also show that in the ten years of operation the annual number of accidents declared has increased from eighty-two thousand in round numbers in 1886 to two hundred and five thousand in 1895. And the number of accidents indemnified per every one thousand declared has been increased from 11,771 in 1886 to 16,451 in 1895. These figures show that not only have more workmen been hurt, but that they have been hurt worse.

There has been a matter of some discussion in connection with this subject as to what proportion of accidents was caused by the fault of the workman, what proportion was caused by the fault of the employer, and what proportion was due to causes which could not be exactly traced to one or the other. The general opinion has been, that from 50% to 55% of the accidents were inevitable or due to causes that could not be fastened upon either employer or employee, and that the rest were to be divided about half and half between employer and workman. Now at Muhlhaus in Germany, careful record has been kept since 1887. The number of insured in 1893 was sixty-one thousand against fifty-nine thousand insured in 1887, so that the comparison is with substantially identical bodies. In 1887 there were 98 accidents indemnified, and in 1893 there were 168. Now the accidents that were paid for and due to the fault of the employer in 1887 were 22, but in 1893 they were 17. Similar accidents due to the workman directly in 1887 were 24, and in 1893 they were 57. Those imputable to workmen

less directly in 1887 were 17 and in 1893 27; while the accidents imputable to chance were respectively 35 and 62.

The moral effect of the system in Germany seems to be evident only in the employers, as is shown by the decrease in the accidents imputable to them. These accidents of course are those arising from defective plant, unsafe location, insufficient inspection, etc. On the other hand, complaint is made of willful disregard of rules on the part of the workmen. They have refused to comply with preventive measures or to take the necessary protective precautions.

As to the matter of litigation, there were 25,348 cases litigated in 1893, nearly half of which were caused by refusal of the authorized boards to allow any indemnity at all. In Austria the same figures of progressive increase in the number of slight accidents are to be observed. The financial side of the Austrian experiment differs very materially from the German. Whoever has made up the budget has been yearly a little too sanguine about the number of accidents that would have to be paid for, and every year the expenditures have exceeded the receipts. In 1895 the excess of expenditure over receipt in the administration of official insurance was 867,452 florins. The cost of insurance for five years has steadily risen both for the individual and on the basis of a thousand florins of wages. In 1890 the cost per individual insured was 2.67 florins. In 1895, it was 3.54, an increase of roughly 21 per cent., and the cost from a thousand florins of wages paid in the same time from 13.96 florins to 15.20 florins.

When we come to an analysis of the kinds of accidents which have relatively increased, we find, as would be expected, that the number of deaths remains quite constant. The cases of total permanent incapacity and of temporary incapacity have about doubled. While the cases of partial incapacity, that is where a man claims that he is permanently unable to do a full day's work, though he can do some part of a day's work, and by reason of such disability is entitled to a small annual payment all his life, have nearly trebled.

To the Yankee it looks very much as if, in the German system, meaning by that the insurance system, the workman had delib-

erately "sojered" on the employer. Of the social and moral effects upon the workman we find, first, that the workman remains without responsibility in regard to his conduct during his work. He does not use the apparatus furnished for him by the employer or by the insuring corporations, to such an extent that there is a loud call among the German employers for legislation which shall make a workman responsible in some measure for accidents. As to his reception of the help which is tendered him, the insuring corporations of employers have found it necessary to construct and maintain hospitals at their own expense and to support physicians and surgeons. In these hospitals the injured man exaggerates his injuries, complains of imaginary pains, and counterbalances the wholesome effects of the treatment by seeking to produce the most striking appearance of incapacity for serious work. As one writer expresses it, "simulation is the leprosy of public insurance." While the workman is doing his part inside the hospital, his friends outside are laboring under a conviction that he is not being cared for in his own interest, but in the interest of the reduction of the allowance that must be paid him. The socialist meanwhile calls the injured man a prisoner, because he is compelled to be treated.

As I have said, the English act was passed in 1897, and differs from the German and Austrian acts in that it provides for no obligatory insurance. It does provide, however, that in case of accident the employer shall be liable to compensate the workman according to a fixed schedule of payments. But it is to be noted that the act is restricted in its application to certain employments, which are railways, factories, mines, quarries, engineering works and buildings more than thirty feet high, where scaffolding is used, or machinery, in the process of construction, repairs or destruction. As with all these statutes, the injury must arise out of or in connection with his employment, and it must happen to a workman. The workman is defined to be anybody engaged in an employment to which the act applies. To receive compensation, however, the workman must be disabled for at least two weeks from earning full wages at the work in which he is engaged. When the injury is caused by the personal negligence or willful act of the employer, that is,

when there is a common law liability on the part of the employer, the workman may either claim the compensation under the statute, or take any action open to him before the introduction of the statute. In considering the English statute, moreover, we have to bear in mind the fact that by the employer's liability act of 1880 a good part of the old common law doctrine of common employment was done away with. This common law doctrine of common employment means that if a man is hurt by a fellow servant, he has no remedy against the master unless that fellow servant stands in place of the master in some relation. The English statute also provides that if a workman's injury can be proved to be due to his own serious and willful misconduct, the workman shall not be entitled to any compensation.

Naturally the question arises, what if workman and employer enter into a mutual agreement at the beginning of the employment that the statute shall not apply to their contract? Or what if they agree upon some other scheme of provision for such injuries? The statute in answer to these questions provides for examination into any voluntary scheme of compensation, and if the scheme is found by the registrar of the Friendly Societies to be on the whole no less favorable to the general body of workmen and their dependents than the provisions of the act, then such an agreement will stand. But it cannot be made compulsory to the workman to consent to such a scheme and contract out of the act, and no such scheme can be approved for a period of more than five years. In one respect the English act is more liberal than the Continental act, in that although persons in the naval or military service of the Crown are not embraced in its provisions, all other employees of the Crown to which the act would apply if the employer were a private person, are brought within its provisions.

The English act provides for capitalized payment in some cases, and annuities or continuing payments in others. In case of death the payment is three times a man's average yearly earnings, not less than £150 and not more than £300. This is of course in case of leaving dependents. If he leaves no dependents, the payment is to cover his medical attendance and burial,

but is not to exceed £10. In the case of total or partial incapacity there is to be a weekly payment of 50% of his wages during the previous year, not to exceed £1. Elaborate provisions for the review of the compensation to be paid are also made, as well as provisions for arbitration, examination, etc.

As nearly as I can find out from an examination of the arguments used by labor agitators to bring about the passage of such legislation, the reason for it is found in the assumption that in modern industrial organizations accident to the workman is inevitable, and that it is not just that the loss arising from such accident should fall upon the workman; but on the other hand, that it should be considered an incident in the expenses of industry. The development of mechanical apparatus has, it is said, given rise to a new notion of responsibility for accidents happening in such work. It is not that the use of this machinery has increased the risk. There are old trades, like those of mining, where the danger incurred by the workman is greater, and there are new trades, like machine spinning and weaving, which occupy a low place in the scale of risks. But while the old workman was working with his own tools at individual tasks, he was properly held responsible for accidents happening to him. But in the modern machine industries the workman is a part of the service of machines which do not belong to him, and which he has not chosen, and for the accidents arising from which he ought not to be held responsible. From this the conviction is formed as the use of machinery develops, that a greater and greater number of accidents ought to be indemnified. The impossibility that often exists of determining clearly the responsibility involved has led courts frequently to divide it between the two parties. It is more just, however, in the eyes of these advocates, that, save in exceptional cases, an indemnity fixed in advance should be due from the employer to the victims of every accident in labor. It was urged in support of this system that it would be better for the employer, as he would know exactly what his obligations were, and it would be more equitable to the workman and in the interests of social peace. Moreover, it was argued that the employer should consider this risk as one of

the charges which he ought to bear, like insurance against fire, the expense of installation, tools, etc. A good deal of talk has been indulged in about industry bearing its burdens, treating industry as a person, etc. It is noticeable, too, that in all the discussions there is a unanimous and hearty condemnation of any scheme which would exempt from the operation of the statute those cases where the accident was due to the workman's negligence, using the term negligence in its legal sense.

It may be said in passing, that none of the social results among workmen which were predicted as consequences of such legislation have followed. Among these results for instance, it was said would be a decrease in the number of contests on matters of damage between workman and employer. Just the contrary has been the result. It was said also that such legislation, especially in Germany, would tend towards social peace, whatever that phrase may mean. I suspect that by "social peace" was meant a contented condition of the workman, and his acquiescence in the present arrangement of affairs. To this it is sufficient answer to say, that the socialist vote in Germany has enormously increased since this accident insurance went into operation. It was said again that the present method of assisting the injured and disabled at the expense of public taxation was unsocial, while under the new system industry would bear its own burdens, and the community at large would be relieved. But it is not found that eleven years of practice have resulted in any diminution anywhere of public charges for the support of the poor.

But the most important side of this subject, and the most important aspect of such legislation to the thoughtful American or English lawyer are that this legislation in the first place absolutely ignores, abrogates, and treats as worn out, that fundamental notion of personal responsibility for the consequences of one's own acts, which lies at the bottom of so much of our law; and in the second place, it introduces a new principle, i. e., that he who has should give to him who has not, simply because he has.

As to the first principle, personal responsibility has always been insisted upon in English law as the foundation of the

doctrine of negligence. Notwithstanding all the refinements to which this doctrine has been subjected, it has never lost sight of the idea of blame. A man has been called to answer for the consequences of his negligence because his negligence has been a social fault. This has been the fundamental idea in the English law of responsibility of master to servant. Wherever the servant has been injured and has asked the courts to compel the master to recompense him, the courts have compelled the jury to answer the question, has the employer been guilty of negligence? and has the employee been free from such negligence as has contributed directly to his own injury? Now, if for negligence you read blame, you get at the fundamental idea of the English law. But accompanying this principle of blame and personal responsibility has been the corresponding principle that a man is not answerable for that for which he is not to be blamed. To translate a Latin maxim, "Fault binds only its own authors." Now the law of master and servant has been carefully worked out by the English and American courts, and by sundry statutes. The standards of negligence have been steadily rising and what might be called the social duty of the master to his servant has more and more impressed itself upon the law. Defective machinery and parsimonious inspection and supervision, unsanitary and dangerous locations, are all brought under the head of employers' negligence. But the servant has himself been held responsible to a reasonable degree of care in his own actions. The master has not been made the guarantor of the safety of his servant, but is bound only to reasonable care in regard to the parties, the business and the circumstances requiring attention.

Where an employee, after having the opportunity of becoming acquainted with the risks of his situation, accepts them, he cannot complain if he is subsequently injured by such exposure. By contracting for the performance of hazardous duties, he assumes such risks as are incident to their discharge. In performing the duties of his place, a servant is bound to take notice of the ordinary operation of familiar natural laws, and govern himself accordingly. If he fails to do so, the risk is his own. He is bound to use his eyes to see that which is open and apparent

to any person using his eyes, and if he fails to do so, he cannot charge the consequences upon the master. And that rule applies to minor servants. But a servant does not of course assume the risk of any danger arising from unsafe or defective methods, surroundings, machinery or other instrumentalities, unless he has or may be presumed to have knowledge or notice thereof.

Furthermore, the servant takes the risk of the master's mode of conducting his business, though a safer one might be followed, if the servant fully knows the risk and continues to work.

Although an employee assumes all the hazards reasonably incident to the service in which he engages, he has a right to rely upon the fact, when placed in a situation of danger where engrossing duties are required of him, that the employer will not without proper warning subject him to other peril unknown to the employee, and from which the work exacted necessarily distracts his attention; and, furthermore, that the usual precautions against accidents will be taken.

An employee leaving his own place of work for one more dangerous, in violation of the direction of his employer, can recover nothing if injured after such a change.

One who by his negligence has brought an injury upon himself cannot recover damages for it. Such is the rule of the civil and of the common law. A plaintiff in such cases is entitled to no relief. The question is, whether the plaintiff so far contributed to the misfortune by his own negligence, or want of ordinary care or caution, that but therefor the misfortune would not have happened. If so, there can be no recovery.

Where, therefore, both the master and the servant have equal knowledge of the danger of the service required and of the means of avoiding it, and the servant while engaged in the performance of the work he is set to do is injured by reason of his own inattention and negligence, the master is not liable. Not so, however, if the master, after becoming aware of the servant's danger, failed to use ordinary care. In actions between master and servant, the true question for the jury is not whether the master could have done something to have prevented the injury; but did he do anything which under the circumstances

in the exercise of ordinary care and prudence he ought not to have done or did he omit any precaution which a prudent and careful man would or ought to have taken.

In order to recover, the plaintiff must establish by a fair preponderance of proof that the defendant was guilty of negligence, and that the injury complained of was the natural and ordinary result of such negligence, and that the negligence was the proximate cause of the injury, which a reasonably prudent and cautious person ought to have apprehended might result from the act which he did.

But the fact that the plaintiff was hurt without his own fault or negligence, cuts no figure in the absence of evidence going to show the defendant to be legally chargeable with the injury.

Now all this has been swept away, and one large body of relations between man and man has been recognized as exempt from what seemed to be the most reasonable and common sense rules.

In the next place this legislation abandons the common law doctrine of compensation. In no case under the English law or under any of the continental laws does the injured man receive back what he has lost, nor does he receive its equivalent. What he receives is an arbitrary portion of it. It is given to him as alms. Its amount bears no relation whatever to the degree of fault which may be ascribed to the master, and the amount of suffering and injury which the man himself has received. It is assessed in the spirit of poor law relief and not in the spirit of damages. It is this form of the compensation awarded under the statute which makes me say that it is a taking from the rich and giving to the poor, because all idea of merit or demerit on either side has been removed, and the only question is, whether the relation of employer and employed existed at the time of the injury?

Another observation occurs to me, and that is, that none of this legislation is or can be general, but must necessarily be special and confined to a part only of the laboring population. If I am a German employer and keep the number of my shop hands down to nine, the law does not apply to me. If I am a German farmer or an English farmer, I may have a thousand

hands under me, and the law does not apply to me. It has been an accepted principle of modern legislation, that it should be general where new burdens were imposed upon the subject of it. It should be general at least in so far that it should apply to all the members of a given class. I do not cite this as a fault in this legislation: I only mention it as one point in which it departs from the recognized habits of English law makers.

Another thing that is noticeable, though it is not new, is the restriction imposed by these statutes upon freedom of contract. This, to be sure, is only one more step in the direction in which legislation has long been tending. There are a great many vital subjects on which we can no longer contract as we will. We can no longer make any contract we please with an insurance company. We can no longer make any contract we please with a railroad company for transportation of our goods, and now the Englishman is forbidden to make any contract he pleases with the man who employs him, or with the man whom he employs, if the employment is one of a certain category.

Now what does all this mean? It seems to me that such legislation is the beginning of the application to our social system of ideas flagrantly in conflict with those upon which it has been built up. It is the beginning of the substitution of society for the man. It is the beginning of the substitution of the Commune for the individual. With this in mind it is rather curious to reflect that the whole history of law, so far as we know anything about it, displays the struggle of the individual out of the traditional bonds in which his city, his village, or his family confined him. In the words of Prof. Maine, "the movement of the progressive societies has hitherto been a movement from status to contract": is it possible that we are approaching the beginning of a reversal of the process, and that we are drifting to a condition where, making allowance for what is termed "industrialism," a man's rights and duties are to be determined more by what closely resembles status than by his own free choice, as expressed by contract?

MORRIS F. TYLER.

New Haven, July, 1898.

DENMARK AND ITS AGED POOR.

MOST students of social questions know more or less of the details of the provision made in the elaborate scheme of German State Insurance for workers whose vigour has waned or vanished with increasing years. Far otherwise is it with regard to the special provision which the neighboring country of Denmark has made for its disabled workers. Some ignominiously thrust it aside as a mere mischievous extension of poor-law relief. Some have never heard of what is being done in a country which they probably regard as insignificant. Yet it is a fact, that a most important social experiment has been made during the last seven years in this little kingdom, and in what follows an account is given of the nature of this experiment and of some of its results, so far as these are at present available.

On the 9th of April, in the year 1891, the law under which the new conditions of the experiment referred to were established was finally approved. It came into operation on July 1st of the same year for all the country, excepting only the metropolis, Copenhagen, and its suburb, Frederiksberg. In these, the operation of the law was delayed till January 1st, 1892. The general purport of the law was, that persons qualified by age and by character were to be entitled to relief from public funds freed from all dishonour, or from any loss of citizenship rights, such as accompany the receipt of ordinary poor-relief. The age qualification is that applicants must have completed their 60th year. The character-test involves several points, failure in regard to any of which destine the applicant to receive assistance in case of destitution from the poor-law funds and under the circumstances of dishonour associated with the pauper. The successful applicant, then, must be free from taint of crime or of misdemeanours involving loss of civil rights and dishonour. He (or she) is disqualified if his need arise from having followed a disorderly or extravagant mode of life, from having made excessive provision

for children or others (in order to qualify by poverty for the relief), or otherwise from his own fault. It is also a disqualification if the applicant has, during the ten years preceding the application, received relief under the poor-law or been found guilty of vagrancy or begging. Further, to state clearly what is assumed in the preceding, grants are only made in case of need; that is to say, age, character and need are all taken into consideration.

A temporary arrangement provided for the case of those who, not having received poor-relief while between 50 and 60 years of age, had yet, when over 60, but before the new law came into force, been driven to seek the assistance of the poor-law. Relief under such circumstances is no disqualification, which merely means that persons who thus accepted the less desirable form of relief are not to be forever condemned to it because they had the misfortune to be old and destitute (though deserving) before the new form of relief was established.

The assistance given must be sufficient to provide the necessities of life and treatment in case of sickness for the applicant and for those dependent on him. The relief may be withdrawn on cessation of need or of merit, and its amount depends on the resources of the recipient, being less where there is income from other sources than where there is absolute dependence on the grant made.

Applicants are required to make a statement of any means they may possess, and of the approximate earnings of their household during the preceding year. They must also state the amount of their debts, if any, the causes of their need and the amount of assistance required. Their statements have to be attested by two persons, who, as well as the applicant, are liable to severe punishment for false declarations. Assistance given while inquiry is being made into the case is accounted as poor-law relief if the application be refused. The applicant's estimate of his own needs serves as a guide (and a maximum limit) in determining how much is to be given. Appeal from the decision of the authority which deals with the application is possible, and to some extent the facility is used. The details of such appeals would lead us aside into some explanation of

the local government of the country, so that we may be content with the knowledge that the decision of the persons who first receive applications is capable of being challenged before higher authorities. This challenge may not only deal with such matters as the amount of a first grant, but with any subsequent alterations in a grant. It ought to be mentioned that, at any rate in the towns, the officials who deal with this special relief are not the same as those who administer the ordinary poor-relief.

As affecting the action of local authorities, the different allocation of the financial burden of ordinary poor-relief and of this special old-age relief must be noted. In the case of paupers, the place of settlement must refund to the place giving relief the whole of its expenses. In the case of these pensions (as it will be convenient to call them) only three-quarters of the outlay can be thus reclaimed. But the burden on the locality granting pensions is less than thus appears, for a grant is made from State funds which is not to exceed one-half of the total expense, and which has so far been almost exactly one-half. A fixed maximum of 2,000,000 kroner (\$536,000) has been set to this State grant, but it remains to be seen whether, if the expenses grow well beyond the point for which this is sufficient, this grant will be enlarged. The total grant is distributed to the various localities in proportion to the expenses of each locality.

Having now presented an account of the new conditions under which pensions are available to the aged poor in Denmark, I might proceed to criticise the system, pointing out its difficulties and reproducing some part of the many and interesting debates of which it has formed the subject among those interested or affected by the scheme. I prefer, however, to present an account of the chief features of the experience under the new system, after which exigencies of space will forbid all but a very few remarks critical of the moral influence exerted by the pensions. The presentation of the facts will, unfortunately, involve statements of numbers and sums of money, and for clearness and brevity these will generally be given in tabular form.

In the first place, one naturally asks how many have availed themselves of the pensions newly and freely provided. These may be conveniently stated separately for Copenhagen itself, as well as for the whole country inclusive of Copenhagen. The population of Copenhagen at the beginning of 1895 was about 334,000, its suburb Frederiksberg having an additional 56,000, no other town having as large a population as 40,000. There was, however, what may fairly be called a town population of about 394,000 besides those mentioned above. The rural population amounted to 1,472,000, giving a total of 2,256,000. These figures are partly estimates, as a general census has not been taken since 1890, and though Copenhagen and a goodly number of other places have had local enumerations of later date, the totals depend in part on estimates for places where no enumeration has taken place. One might present the figures in many ways, distinguishing urban from rural conditions and the metropolis from other towns. I shall content myself with giving figures for the kingdom generally, and illustrating town conditions in separate details for Copenhagen. A consideration of actual populations will enable the real meaning of the figures to be read.

The following table shows the numbers of pensioners year by year in the whole kingdom, these numbers being followed by those for Copenhagen alone in brackets:

Numbers.	Heads of Families.	Single Persons.	Dependents.	Total.
1 Jan., 1892,	9,029 (—)	14,914 (—)	10,789 (—)	34,732 (—)
New cases 1892,	2,744 (807)	7,423 (3,487)	3,371 (953)	13,538 (5,247)
Ceased to be reliev'd,	997 (53)	2,156 (235)	1,291 (63)	4,444 (351)
1 Jan., 1893,	10,776 (754)	20,181 (3,252)	12,869 (890)	43,826 (4,896)
New cases 1893,	1,717 (148)	3,604 (646)	2,139 (208)	7,460 (1,002)
Ceased to be reliev'd,	1,063 (112)	2,285 (316)	1,356 (141)	4,604 (569)
1 Jan., 1894,	11,138 (790)	22,189 (3,582)	13,051 (957)	46,378 (5,329)
New cases 1894,	1,498 (144)	3,068 (554)	1,763 (268)	6,329 (966)
Ceased to be reliev'd,	1,009 (93)	2,189 (342)	1,095 (115)	4,293 (550)
1 Jan., 1895,	11,423 (841)	23,280 (3,794)	13,706 (1,110)	48,409 (5,745)
New cases 1895,	1,715 (178)	3,547 (633)	2,136 (246)	7,398 (1,057)
Ceased to be reliev'd,	1,218 (110)	2,501 (318)	1,619 (200)	5,338 (628)
1 Jan., 1896,	11,920 (909)	24,326 (4,109)	14,223 (1,156)	50,469 (6,174)
New cases 1896,	1,794 (182)	3,687 (596)	2,241 (273)	7,722 (1,051)
Ceased to be reliev'd,	1,173 (106)	2,579 (389)	1,509 (149)	5,261 (644)
1 Jan., 1897,	12,541 (985)	25,434 (4,316)	14,955 (1,280)	52,930 (6,581)

It may be observed that discrepancies in the tables in the figures for 1893 and 1894 arise from the fact that the totals are the revised figures published in later reports, while the figures of new cases and of cases going off the relief list are those given in the returns for the years concerned, that is, they are not finally revised. The rapid increase in the first two years of the table is, in part, due to the introduction of the system into the capital city. It may be noted, too, that the rest of the country supplied in half-a-year rather over seven times as many pensioners as did Copenhagen in a whole year, while its population was less than six times that of Copenhagen. This is in part due to the smaller proportion of aged persons in Copenhagen than in the country at large.

Another point worthy of note is that Copenhagen furnishes a much larger proportion of single persons, and it might be added that a larger proportion of these are women, than are found in the rest of the kingdom. A more serious feature of the returns by far is the more rapid growth of numbers in Copenhagen than in the country generally. This will best be seen in relation to the population and in relation to the numbers of those who might, so far as age alone is concerned, claim the benefit of the relief-law. In this form, too, the figures will have rather more meaning than when shown as mere numerical totals. For these comparisons I have assumed (except in the case of Copenhagen, for which actual figures are available from the 1895 Census), that the proportion of the whole population over 60 was the same in each year as in 1890.

The table which follows shows the proportion to the whole population, and to the population over 60 years of age, of all receiving old-age relief, including dependents, some of whom at any rate are under 60. There is also shown the proportion of actual to possible pensioners by sexes, dependents not being reckoned in this case. Wives, even though over 60, will not appear except as dependents on their husbands, unless they are separated from them, and therefore, the possible women pensioners do not include wives whose husbands were living and not divorced or separated. Some trifling differences between the following table and the earlier official returns are accounted for by the more accurate estimate of population made possible by the 1895 enumerations of population.

PROPORTION OF PENSIONERS TO POPULATION.

[The number in brackets refer to Copenhagen, the others to the whole of Denmark proper.]

	Total pensioners, including dependents, as a percentage of		Male pensioners (not including dependents) as a percentage of males over 60.	Female pensioners (not including dependents) as a percentage of single, widowed and separated women over 60.
	The whole population.	The population over 60.		
1 Jan., 1892	1.85 (—)	17.03 (—)	13.75 (—)	19.28 (—)
1 Jan., 1893	1.97 (1.50)	19.31 (19.66)	14.70 (13.30)	22.04 (22.05)
1 Jan., 1894	2.10 (1.61)	20.28 (20.99)	15.48 (13.62)	23.88 (23.65)
1 Jan., 1895	2.15 (1.72)	21.01 (22.20)	15.92 (14.49)	24.78 (24.00)
1 Jan., 1896	2.22 (1.83)	21.74 (23.41)	16.38 (15.23)	25.89 (25.24)
1 Jan., 1897	2.31 (1.92)	22.66 (24.50)	16.93 (16.06)	27.08 (25.62)

The importance of showing the figures, not merely in relation to the population at large, but also to that section of it over 60, is clear here. The country at large had rather more than 10 per cent. of its population over 60. Copenhagen had but 7.5 per cent. over this age. This last figure had increased to 7.75 per cent. by 1895. Whether part of the increase is fictitious and due to hope of winning a pension, or whether the whole is attributable to the fact that the increase of population is proceeding at a less rapid rate than formerly, one may hesitate to pronounce definitely.

The preceding facts, so far as one aspect of them is concerned, may be conveniently summarised in another form. For every 20 single persons (of whom fully 15 were women) who were awarded pensions, 10 others were pensioned on whom there were dependent 12 wives, children or other members of the families which they represented. These 30 pensioners and 12 dependents were found for about every 220 persons over 60 years of age at the beginning of 1893, but there was needed only 180 persons over 60 to supply such a group of pensioners at the beginning of 1897. The round figures may convey a better impression of the facts than the detailed, and more precise, table.

While the numbers availing themselves of the pensions were large and increasing, there is a further fact relating to them which is of great importance, and that is the way in which they are distributed over the age-periods after the 60th year.

It will be enough to refer to the figures for the later dates on this point. Of men between 60 and 65 only about 1 in 16 was receiving relief at the beginning of 1896. Between 65 and 70 the number grows to rather over 1 in 7, and more than a quarter of all men who had passed their 70th year had applied for and were receiving old-age pensions. It certainly appears as if the administration of the law has been characterized by great discrimination, or that the independence of spirit of the people is far from being undermined, when so many refrain from availing themselves of honourable assistance, or are refused the relief, in spite of the mere age-qualification being more than met. In the case of women the proportion of pensioners is, as might be expected, higher than for men. In 1896, of women other than wives living with their husbands, 15 per cent. of those between 60 and 65 were in receipt of pensions, 24 per cent. of those between 65 and 70 and over 31 per cent. of those older than 70. For Copenhagen, the percentages of pensioners at the three age-periods were, roundly, for men, 7, 16 and 24 respectively, and, for women, 19, 29 and 33 respectively. Thus, as compared with the whole kingdom, there is a slight excess of the younger men, and a rather less proportion of the older, who are pensioners in Copenhagen. The excess among women is considerable at all ages, especially at the lower ages.

Two other points may be mentioned in reference to the numbers of pensioners. The first is, that in a number of places it has been found desirable to lodge the pensioners in homes, some of which, at least, are specially assigned to them alone. In 1896 there were 426 thus cared for in Copenhagen, and 339 others in various parts of the kingdom outside the capital. The second point is that the returns show that the cessation of pensions on the ground of misconduct or of cessation of need, though not excessively frequent, is yet a reality, and, moreover, not in process of vanishing.

It is now time to turn to what is, perhaps, the next most important feature of the scheme we are considering, namely, its cost. In giving the cost in dollars, the figures will be rounded off for convenience. The actual total expenditure has been as shown in the following table:

TOTAL COST OF OLD AGE RELIEF.

Year.	DENMARK.			COPENHAGEN.		
	Cost to the localities.	State Contribution.	Total.	Cost to the city.	State Contribution.	Total.
1892	\$413,856	\$271,924	\$685,780	\$71,613	\$47,742	\$119,355
1893	421,161	373,232	794,393	81,238	72,041	153,279
1894	437,193	433,974	871,167	82,035	82,035	164,070
1895	482,620	481,746	964,366	91,626	91,626	183,252
1896	521,063	522,824	1,043,887	98,683	98,683	197,366

The increase of the cost has been, therefore, 50 per cent., comparing the last year of the five with the first. As between these two years the growth of expense in Copenhagen appears much greater than in the country as a whole; but by omitting 1892, Copenhagen's initial year, the growth of expenditure there is seen to be even slightly less rapid than elsewhere. The capital, however, spends more in proportion to population than does the rest of the kingdom. It is necessary, on account of the greater cost of living, and probably also because in the more strenuous life of the city men cease earlier to be capable of earning a living, to give larger amounts to pensioners in the capital than to those elsewhere. As before, the figures will become more pregnant with information if we deduce from them the cost per head, either of those assisted, or of the population at large, or perhaps, as a better clue to the real meaning, on account of the varying proportions of old people in different countries, per head of the population over 60 years of age. We have, then, another tabular statement as follows:

COST OF OLD AGE RELIEF.

Year.	DENMARK.			COPENHAGEN.		
	Cost per head of			Cost per head of		
	Total population.	Population over 60.	Persons relieved in the year.	Total population.	Population over 60.	Persons relieved in the year.
1892	\$0.311	\$3.04	\$14.21	\$0.372	\$4.89	\$22.74
1893	0.357	3.50	15.49	0.471	6.16	25.99
1894	0.389	3.81	16.53	0.498	6.46	26.06
1895	0.427	4.19	17.28	0.549	7.08	27.14
1896	0.459	4.50	17.94	0.584	7.49	31.71

Even after making due allowance for the figures of the initial year of such a system, the increase shown in the cost during the later years is very serious. The higher level of cost in Copenhagen is also most striking, especially as the figures for Denmark include, and are swollen by, those relating to the capital city itself.

The figures of cost per head of persons who were relieved at some time during the year to which the figures of expense relate are not satisfactory. The official returns supply figures, or the material for compiling figures, of average grant per pensioner. These are as follow:

AVERAGE AMOUNT OF PENSIONS GRANTED.

Year.	Copenhagen.	Other Towns.	Rural Districts.	Denmark.
1892	\$32.00	\$27.70	\$20.53	\$23.42
1893	37.60	29.71	21.29	24.25
1894	37.95	31.07	21.94	25.69
1895	39.31	32.75	23.38	27.23
1896	40.68	33.96	24.26	28.32

In comparing these figures with those of the last table, it must be borne in mind that many of the pensions were not enjoyed for a full year, especially in the first year or two of the tables. We have here the average grant made; in the preceding table the average amount spent per pensioner. Further, here we have the grants per case, there the expenditure per person relieved, and a case may include two or more persons, as, for example, a man and wife. The grants per individual relieved might be shown, but would be unnecessarily tedious.

In connection with the question of cost, a very important point to inquire into is the effect of the new system on ordinary poor-law expenditure. On this point a report was presented in the summer of 1897 to a parliamentary committee which was considering proposed changes in the law. In this report it was shown that previous to the introduction of the new system, the poor-law expenditure has been increasing, but that the increase had ceased very soon after its introduction, and has

been succeeded by a decrease. This decrease is not shown in quite equal strength in city and country, but it exists in both. How great it is may be seen by taking the summary of the report referred to. Apart from expenditures on new buildings, the outlay on poor-relief increased at such a rate before the new system of old-age relief was devised that, had the growth been maintained at the same rate, the expenditure in 1894 would have been about \$440,000 greater than it was in reality, an excess representing not far short of 25 per cent. of the actual expenditure of 1894. There had been an actual falling off of \$237,000 from the highest point reached. The reduction in the cost of poor-law relief may be reasonably placed at some amount between these two figures. It is to be observed that the larger of the two exceeds somewhat the total expenditure of the local authorities on old-age relief in 1894. It is probable, therefore, that by far the greater part of the expenditure of these authorities on the pension-system is saved from poor-law relief, and that the total cost to the country in 1894 of the pensions was but little in excess of the State contribution. The rural districts, in particular, probably saved as much on poor-relief as they spent from their own funds on pensions to the aged. For years later than 1894 no published comparison similar to the above exists. I have recently been privately informed by the eminent statistician Hr. Marcus Rubin, that the later figures show similar results to those noted for 1894.

Such a result is remarkable, and it may be attributed to either of two causes. In part, cases which would formerly have been treated under the law dealing with paupers are now dealt with under the pension-law. Some severe critics might even go so far as to say that the line between paupers and pensioners is not drawn very distinctly and that its lack of precision is a highly mischievous result of the system of pensions. Another cause of decreased poor-law expenditure is, however, to be found in the efforts made by those who desire to qualify as pensioners to keep free from the pauper-taint during the necessary period of qualification—between the ages of 50 and 60. If dependence be made easy after 60, a strong stimulus to independence before 60 is provided, the results of which may well

be found to extend beyond the point originally aimed at, namely the age 60.

For Copenhagen itself, returns of the numbers of paupers are readily obtainable and these show that the presumption created by the decrease of expense of poor-relief, namely, that the numbers obtaining that relief were decreasing, is borne out by the actual facts. The rapid increase of paupers and of the cost of their relief which marked the years 1886 to 1892 has been succeeded by a decrease in absolute numbers and in expense, in spite of the increase of population. It will be worth while stating that over 10,000 persons receive relief under the poor-law each year in Copenhagen, at a cost of over half a million dollars.

On one further point only do I propose to refer to figures in this article. A complaint is made that persons of or about 60 years of age migrate to places where they hope to get larger pensions than would fall to their lot if remaining at home. Such migration, too, removes them from the probability of securing light work suited to their increasing age and weakness, but which they might secure to their own advantage and that of others who would employ them, if they remained in the places where they were well-known. A particular case is afforded by a statement made to me by one of the members of that sub-committee of the town council which had charge of the pension-system in a small provincial town. This gentleman said that it had become increasingly difficult to get old men in the neighboring country districts to look after the cattle, a light task quite within the capacity of such persons where the methods adopted are such as may be seen in that district. How can one judge of the extent of the evil thus indicated? Perhaps a good, though not a perfect, measure of it is afforded by the percentage of pensioners whose place of settlement is not their place of residence. Has the proportion of such increased or not as the pension-system has developed? The following table shows the percentage of new pensioners in each year who were settled in the place where they received pension-grants, that is, who were chargeable by law on those places in case of destitution.

PERCENTAGE OF NEW PENSIONERS HAVING LEGAL RIGHT TO RELIEF IN THE
PLACES GRANTING THE PENSIONS.

Year.	Copenhagen.	Other Towns.	Rural Districts.	Denmark. (Whole Country.)
1892	92.5	70.8	83.1	85.1
1893	86.0	72.4	82.3	80.9
1894	84.0	71.2	82.5	80.0
1895	84.8	70.5	83.2	80.9
1896	84.6	68.2	81.1	78.9

Though the direction of the changes shown in this table indicates increased migration from place to place, there is no strong indication of a current due to the cause assigned above. It must be again remembered that the abnormal figure for Copenhagen (and for Denmark, including Copenhagen) in 1892 is connected with the initiation of the system in that year. The exceptional figures shown under "other towns" are doubtless connected with the rapid growth of these small urban communities, which registered a growth of 10 per cent. between 1890 and 1895 as against rather under 7 per cent. growth of numbers in Copenhagen, and less than 4 per cent. for the whole kingdom.

A further point in favour of the view that people belonging to the country seek the towns for the purpose of there getting pensions is the steady increase in the repayments made, in accordance with the provisions of the law, by one locality to another. The amounts thus repaid by rural to urban districts showed increase, both absolutely and in proportion to the total expended. In view of the drift from country to town for other reasons than the securing of a larger pension after 60 years of age, and of the increasing movement of people from place to place as locomotion becomes easier and cheaper, it would be wise not to assign the whole of these increased payments, and of the changes in the percentages shown in the last table, to deliberate action in view of pensions.

Further statistical detail is undesirable in this account, if the limit has not already been exceeded. A few words on the general effects of the new system will not be out of place. These remarks are founded on conversations with a number of gentlemen having intimate personal knowledge of the working

of the system, as well as on reports of public discussions and similar critical examinations of the matter in question.

That defects exist, and are recognised, in the working of the law, must be frankly admitted. A very special difficulty is created by the question whether a person possessing some small property should be granted relief from such public funds as those from which the pensions are paid. Should not such an one be required to first maintain himself from his property as long as it sufficed for the purpose? In that case is the property secured against waste,—waste of a real nature if not sufficiently marked to disqualify for a pension? Would it not be better for the public authorities to give relief but retain the right to reclaim it as far as possible from any property left at decease by the recipient of the relief? I indicate here but one of the difficult questions of administration.

On the whole, however, I am impressed by the favorable view of the law and its working taken by my informants. As a sample I may refer to an opinion expressed to me in correspondence more than three years ago and since confirmed in repeated conversations from time to time. This opinion emanates from Professor Falbe Hansen, a Professor of Political Economy in the University of Copenhagen, and may be summarised thus. It may be admitted that thrift and private charity are discouraged, so far as they touch persons over 60 and the provision for maintenance over 60; also that the stimulus to labour is weakened after the 60th year is passed. But, on the other hand, both thrift and private charity have been stimulated so far as they are concerned with provision for maintenance between the ages of 50 and 60. The motive for maintaining independence during these years is strengthened, and its effectiveness is greatly increased by the consideration that a limited task, the completion of which is not so distant and uncertain as to deter men from attempting it, is all that is now imposed on the honest and industrious, though indigent, person, or on friends, former employers or others, who may be interested in helping him. Many shrink from trying what seems impossible of achievement, and much effort, which would otherwise have remained latent, has been evoked by bringing the task within the reach of a wider circle of persons.

Wisdom in administration may do much to keep awake the independent self-supporting instinct even in face of such provision as this, apparently free to all worthy persons. The standard of worthiness may be kept strictly enforced. Those able to continue at work may be encouraged to do so, as, for instance by a method explained to me by one administrator, who said that in cases where persons capable of work applied and were able to establish a claim in all other respects, their capacity for partial self-support was insisted on, and if a grant was made, it was often quite small, comparable with a dollar a month, for example.

Whatever else may be said of it, the Danish plan of providing for the aged who have, through no fault of their own, fallen on bad times, possesses too much of interest to permit us to dismiss it from consideration as a case of laxity of poor-law relief under another name.

A. W. FLUX.

Manchester, England.

QUESTIONS TO BE ANSWERED BY APPLICANTS FOR OLD AGE RELIEF, AND
ATTESTED BY THEM.

[NOTE.—A somewhat different set of questions is used in the case of widows and divorced or separated women.]

1. Has the applicant been constantly resident in this country, without intermission, for the last ten years ; if so, where and for how long in each place ?
2. Has the applicant, in the course of the last ten years, received any poor-relief for himself or for his wife, or for legitimate or illegitimate, adopted or step-children ; if so, of what has it consisted, when was it received and from what commune ?
3. Has the applicant, in the course of the last ten years, been found guilty of vagrancy or begging ?
4. Has the applicant ever been condemned to punishment for crime ; if so, when and how did it occur ?
5. In what commune does the applicant consider himself to be settled ?

[As a rule that commune in which he has last resided for five years without intermission and without receiving poor-relief, or, in case there has not been such a residence, his place of birth.]

6. The number of his family and the ages of its members ?
7. Is the applicant living alone, or with his family or others, and in the latter case, with whom ?

8. (a) What means of support has the applicant or the members of his household?

(b) The approximate amount of the total income of the applicant and his household in the last year?

(c) How much of this income was derived from pension, allowances, dividends, legacies, real property, assistance (i. e. of children or friends), or the like income, each item separately stated as far as possible?

9. Has the applicant any prospect of assistance from relatives or others, or has he reason to expect to succeed to any inheritance?

10. The applicant's means?

[Money, real property, allowances, moveables, debts owing, etc., with statement of approximate value.]

11. The applicant's debts?

12. How much did the applicant pay in house-rent in the last year?

13. The cause of the applicant's need, and in this connection, statements of his own and his wife's health and working power, etc.?

14. How much does the applicant require, and of what does he wish it to consist (i. e. if in kind)?

15. Any further remarks which the applicant thinks proper to make.

The answers to these questions with papers establishing the age, identity, etc., of the applicant constitute the form of application, to which is appended a declaration of the truth of the statements signed by the applicant, and a signed declaration by two others that, from their personal knowledge, the need of the applicant is not due to extravagance, etc., in fact to his own fault.

NOTES.

Rotten Boroughs of Old and New England. In many of its aspects the movement for the reform of the representative system in Connecticut is strikingly similar to that for Parliamentary reform which dragged along in England through three centuries, from the time of Queen Elizabeth until the Reform Acts of 1884 and 1885. In England, as in Connecticut, there were no inequalities when the representative system first came into being. The inequalities in England were developed first by the successful efforts of the aristocracy to possess themselves of Parliamentary boroughs, and later on by the growth of population. As in Connecticut during the last forty years, the development of these inequalities in representation was hastened by the great developments in industry. This was especially so between the Revolution of 1688 and the end of the eighteenth century, which witnessed the beginning of the factory era and the growth of great industrial centers, such as Manchester, Leeds and Birmingham.

The creation of Parliamentary boroughs in England, which first tended to inequalities, came to an end before the Commonwealth. Only one borough was given representation between the Restoration and 1832; and when the House of Commons was reformed in 1832, except for the merging of two or three corrupt boroughs into county areas, and the introduction of Members from Scotland and Ireland at the Unions, the representative system stood as it did when the Stuart dynasty came to an end.

In its early nineteenth century beginnings, the representative system in Connecticut was not unlike the English representative system. When the English system was established in the thirteenth century, it was the fault of a borough if it were not represented by two Members. In the early days of the House of Commons and until the fifteenth century, when wages began to disappear and seats in Parliament became in demand, the grievance of towns was not that they were unrepresented, but that they were compelled to bear the burden of the charges attending representation.

The constitution which the reformers of Connecticut seek to amend is that of 1818. When this constitution was adopted, there do not seem to have been any inequalities in the representation. All the Connecticut towns were then in the position of the English

boroughs during the first two centuries of the House of Commons. They were all small, as towns go nowadays, and all of them were represented. As in England during the first centuries of the House of Commons, Members of the Legislature had to be residents of the towns they represented, and they were paid wages. The only difference between the two systems as regards wages was that the English towns had to pay them from local taxes, while in Connecticut Members were and are still paid from the State Treasury. In Connecticut representation in the Legislature has always meant one or two offices more for a town, and offices, moreover, the salaries of which do not come out of the town funds. There would have been few of the anachronisms and inequalities which marked the English system in the two centuries preceding the great Reform of 1832, had wages in England been paid from national instead of local funds.

At the time the system of representation which had grown up in Connecticut in the eighteenth century was stereotyped by the Constitution of 1818, there was no marked disparity between the one hundred and twenty towns then sending representatives to the Legislature. There was not much call for a redistribution measure in 1818, when the two largest cities in the State had each populations of less than seven thousand. Two members each for New Haven and Hartford formed a fair representation; for many of the smaller towns had then only one member. For thirty years after the adoption of the Constitution of 1818, the larger towns had still no very serious grievance. They were growing in population, but not at anything like the rate of the last thirty years. With the development of manufacturing, the cities have grown enormously; while these same causes, together with the opening out of the West, have tended to the partial depopulation of farming towns, and have had the effect of making most of them at least stationary in population.

Up to the Federal Census of 1890, these changes had gone on to such an extent as to make the inequalities of representation glaringly obvious, quite as obvious as were many of the inequalities in the English Parliamentary system up to the Reform of 1832. Since 1890, the movement to the cities and to the manufacturing towns has been proceeding at an accelerated pace, with the result that to-day New Haven has a population of nearly 100,000, Hartford 75,000, and Bridgeport nearly 60,000. Nothing has occurred since 1890 to stay the decline of the farming towns. The net

result of these movements of population, combined with the rigidity of the representative system, is that to-day six or seven large cities, containing half of the population of the State, have practically no weight in the Legislature. It is true that each large city has still two members; but when it comes to a vote, New Haven, Hartford and Bridgeport are hardly appreciably better off than were Manchester, Leeds and Birmingham in the House of Commons before 1832. The representation of the Connecticut cities secures them little more than the privileges of the floor; and although Manchester, Leeds and Birmingham did not directly enjoy this privilege in the Unreformed Parliament, indirectly they did so, because the forty shilling free-holders of Manchester voted for Members for the County of Lancaster, and Manchester had direct claims upon these Members at Westminster. In the same way Leeds had claims on the Yorkshire Members; while Birmingham had equal claims on the representatives of the County of Warwick.

The cities of Connecticut are quite as unfairly treated in the matter of representation in the Lower House as were Manchester, Leeds and Birmingham under the Unreformed English system. If these English cities could bring their county Members round to their point of view, the votes of these county Members in a division in the House were liable to be neutralized by votes given by each of the two Members from such miserable apologies for Parliamentary boroughs as Old Sarum, Gatton or Dunwich. At Old Sarum, all through the eighteenth century, there were no resident electors. There were no houses, and at election times a tent had to be pitched on the grass-grown site of the long vanished borough to shelter the returning officer. At Gatton there were six houses and one voter; while at Dunwich, so much of the borough had been washed away by the German Ocean that had Parliamentary Reform been much longer delayed, the electors might have been obliged to convene in a boat when the sheriff's precept summoned them to exercise the Parliamentary franchise.

The Unions, the East Granbys, the Scotlands, and the other stationary or decaying towns of rural Connecticut have not reached the level of the Sarums, the Gattons and the Grampounds of the eighteenth century House of Commons. But the inequalities between the Connecticut cities and these small towns are as illogical and as unfair as those of the old system in England, and it is easy to understand how the English eighteenth century term "rotten boroughs" has come to be applied in Connecticut. These Con-

necticut boroughs are not rotten in the sense that scores of the old English boroughs were rotten. They are not owned outright by landed families who nominate the members of the Legislature. There are no self-elected freemen, no burgage tenures, no pot-walloper voters, and in none of them is the right of election vested in a dozen aldermen to whom the possession of a vote is a permanent source of income. The Connecticut boroughs are far less picturesque, and also much less corrupt and squalid than their old English prototypes. But their existence produces on the electoral system the same effects as the Gattons and Old Sarums produced in England, and makes a fair and adequate representation in the Legislature an impossibility. From the point of view of a representative system based on population, the advocates of constitutional reform in Connecticut have as good a case as had the English reformers. In some respects they have a better case; for in this country the Federal electoral system is uniformly based on population.

The practical disadvantages of the Connecticut system are not as obvious nor as vitally important as those of the old English system. The English system, as it existed for three centuries, made it impossible to have a really constitutional sovereign, and there never was a constitutional sovereign until Queen Victoria came to the Throne. Every sovereign almost from the beginning of Parliament was, to a greater or less degree, a political boss, striving to obtain his ends through the control of the House of Commons, obtained in the first instance at the elections.

The Connecticut system has not developed evils in any way comparable to those of the unreformed Parliamentary system in England. Its chief disadvantage is that, in the present condition of national political parties, it keeps one of these parties permanently in power, and gives this party a monopoly of the senatorships at Washington. It also tends to accentuate the political antagonism between rural and urban populations, and in other ways works to the disadvantage of the cities.

The agitation for reform has gone on in Connecticut for nearly thirty years with but the smallest measure of success. Only two points have been achieved. Neither is of direct value to the large cities. By an amendment adopted in 1874, it was made possible for any town with a population of at least five thousand to obtain two representatives in the House. The second amendment, which was adopted in 1876, stayed the increase in the number of small

boroughs; for it provides that no new town shall be entitled to a representative in the Legislature unless it have a population of 2,500, and the town from which it splits off also have a population of 2,500.

Since 1876, the Connecticut reformers have achieved no other success. The Connecticut small towns, like the rotten boroughs in England, are not disposed to submit to their own extinction. At the time of the War of the Revolution, when for the first time since the Commonwealth, the movement for Parliamentary Reform in England became general, it looked as though the Reformers were embarking on an impossible undertaking. There were then in England 231 boroughs, returning 413 members. Of these only 51 boroughs had wide franchises, and were open. The other 180, returning 328 members—more than half the total number of the House, were in the hands either of proprietors who owned them absolutely, or of men who in those days were euphemistically termed patrons. To-day those patrons would be described as bosses. More than this, many of the owners and patrons of these boroughs were of the House of Lords. They were there, many of them, for their services to the Crown as borough owners; so that if a Reform bill passed the House of Commons, it had to run the gauntlet of the borough owners in the House of Lords. The guard in the Lower House was, however, so strong that, until 1831 no general Reform bill was sent from the Commons to the Lords.

Impossible as the task of the English reformers appeared in the closing decades of the eighteenth century, it was not more hopeless than is the movement for constitutional reform under existing conditions in the State of Connecticut. The Connecticut towns are as tenacious of their undue privileges as were any of the old boroughs in England. For two centuries, Parliamentary votes in most of these towns had had a cash value. During the greater part of the eighteenth century, in some of the smaller towns, this value had mounted up to as high as £50 or £60. Votes in the rotten boroughs of Connecticut may or may not have a cash value. If they have, it surely cannot be so high as that of votes in England. But apart from any value of votes, the possession of two representatives means two more offices in a Connecticut town and a larger share, than would perhaps otherwise accrue, of both Federal and State patronage.

Under these circumstances it is clearly as useless for the Connecticut reformers to attempt to push their movement in the small

towns as it was for the English reformers in the first generation of their movement to seek to elect in close and rotten boroughs members pledged to Reform. Pitt, during the few years when he was sincerely advocating Parliamentary Reform, fully realized this difficulty, and by the Reform bill he proposed, the National Treasury was to be drawn upon to buy up the rights of the borough owners in order that the franchises might be distributed among the unrepresented large towns and among counties such as Yorkshire and Lancashire, which were inadequately represented in the House of Commons.

The English Reform agitation succeeded in the long run from causes which are not likely to operate in Connecticut. There were forces at work in England which can have no counterpart in the Connecticut movement. One of these was the fact that in most of the boroughs only a small proportion of the people had votes. The voters constituted cliques, and the advantages they enjoyed made them the envy of their fellow-townsmen, and established in nearly every borough a force which was continuously at work for a wider Parliamentary franchise. It was these forces, working in the towns, which kept the Reform movement going from the Commonwealth to the American Revolution, when the movement became general. Another force which helped Reform in England was the County Members. They first attached themselves to the movement at the time of the American Revolution. The counties, in fact, made the movement general and national; because they saw that there could be no check on the Government, and no permanent retrenchment of national expenditures, as long as Administrations good or bad were upheld in Parliament by the borough interests.

A third force was the unrepresented large towns. They came into the Reform movement later than either the voteless inhabitants of the close and rotten boroughs or the counties which were demanding retrenchment in national expenditure. When once these towns were of the movement, they stayed in it to the end. They kept it alive during the trying decades which followed the French Revolution, when all the power of the Government was used to suppress political agitation, and when the period of repression came to an end with the peace after Waterloo, the large towns once more came out openly and vigorously for Reform, and did not permit the agitation to cease until they were secure in the possession of direct representation in the House of Commons.

In the final crisis of the early thirties, the movement was also aided by the fact that the borough owners and the borough patrons had never been all of one political party. Whigs, as well as Tories, owned boroughs, and when the Grey Ministry committed itself to Reform and Reform had become inevitable, the Whig borough owners accepted their fate, and fell into line with the movement for Reform. In the House of Lords, a threat to make peers wholesale crushed out the opposition, and the nondescript system of Parliamentary representation which, except for a few years during the Commonwealth, had lasted for two centuries, was swept away, and the foundations were laid for the democratic system which since 1885 has existed in England.

The old system, in its curious and picturesque details and its squalor as well, was peculiar to England. So were the forces which when united swept it away. No similar forces seem in sight in Connecticut; but the lesson which the history of Reform in England has for Connecticut, is that with earnestness and perseverance a right and just cause must inevitably triumph.

EDWARD PORRITT.

Farmington, Conn.

Some Recent Books on Our New Possessions. The war with Spain has had the effect of increasing our knowledge of distant countries and of stimulating a thirst for further information. Several substantial volumes have already been put upon the market to satisfy this demand.

One of the first is entitled "Commercial Cuba," by Wm. J. Clark, with an introduction by E. Sherman Gould, and is published by Charles Scribner's Sons (1898). This is a volume of nearly five hundred pages, amply illustrated from photographs, and containing a somewhat detailed account of the geography, natural resources, and commercial possibilities of the different provinces of the island.

A similar work, but covering a larger field, is "Cuba and Porto Rico; with the other islands of the West Indies," by Robert T. Hill (The Century Co., New York, 1898). This book, which contains over four hundred pages, is very fully illustrated, and contains an account, not only of Cuba and Porto Rico, but also of the more important islands in the West Indies, describing their topography, climate, products, industries, political condition, etc.

Somewhat different in its scope is Prof. Dean C. Worcester's work on the Philippine Islands, published by The Macmillan Co., (1899). Prof. Worcester visited these islands in 1887-88, and again in 1890, for scientific purposes. He made the first trip under Dr. Steere and the second with Dr. Frank S. Bournes. He was engaged during most of the time in collecting zoological and ethnological specimens. Incidentally, however, through letters of introduction to the Spanish officials, he saw a good deal of the political and social condition of the islands. The book is, in the main, a description of scientific expeditions, but also contains many facts of interest with regard to the inhabitants of the islands and the Spanish Government.

A New Volume on the Liquor Problem. The Committee of Fifty, which has been investigating the liquor problem since 1893, and which published in 1897 a report upon *The Liquor Problem in its Legislative Aspects*, now announces a second volume of the series, the work of another of its sub-committees. This volume treats of *The Liquor Problem in its Economic Aspects*, and will be published, like the first, by Messrs, Houghton, Mifflin & Co., Boston. The greater part of the volume will be devoted to an elaborate statistical investigation of the subject by Mr. John Koren.

The special topics covered by this investigation are the relations of the liquor problem to poverty and crime, to the Negroes, and to the North American Indians, and the Saloon considered as a social institution. The general subject of economic forces working for and against the liquor habit is treated in the introductory report of the Economic Sub-Committee. It is expected that the book will be published in the spring.

BOOK NOTICES.

The Establishment of Spanish Rule in America. By Bernard Moses, Ph.D., Professor in the University of California. New York and London, G. P. Putnam's Sons, 1898—x, 328 pp.

This is a very opportune book and affords the best available general account of the establishment of Spain's power in America. While an accurate and scholarly treatment of the subject, it is not a detailed and critical analysis of Spanish development in the New World. In fact, it is especially valuable for the very reason that it is designed to reach a wide class of readers which a detailed and critical work would not interest. For, as the author tells us in his Preface, the book is designed "to make clear to ordinary readers and to students in high schools and colleges the origin and character of the political and economic institutions constructed for the government of Spanish America."

The third chapter, "The Casa de Contratacion," the fourth, "The Audiencia and Viceroy Illustrated by Mexican Affairs," and part of the eleventh, "Spain's Economic Policy in America," have already appeared in the Report of the American Historical Association, 1893, the YALE REVIEW, and the Report of the American Historical Association, 1894, respectively. They are, however, rewritten and largely changed. The Introduction is a spirited sketch of some main points in the history of Spain from the time of the invasion of the German tribes to the discovery of America. It is worth noting how clearly Professor Moses has indicated the cause of that peculiar quality of mind which has given the Spanish nation "a point of view quite its own."

The important part that the Jew played in early Spanish history and his contribution to the characteristics of the modern Spaniard are thoroughly well traced. On the whole, the author concludes that the period when Spanish territory was divided between the Moslem and the Christian was the best period of Spanish history, and the period when she seemed about to become not only the successful rival of England as the leader in western civilization, but when she seemed best able of all western nations to establish a high grade of civilization.

The point of change which led to the gradual decline of Spain is accurately arrived at. The absolute control of the church over all governmental policies, causing economic and political considera-

tions to be thrust aside, had dire consequences. It led to religious intolerance. It led, further, to royal absolutism, against which religious intolerance had left no spirit of progress and resistance. Not only that, but it forced from the kingdom Jews and Moriscoes who were the very foundation of Spain's industrial and commercial development.

The discussion of the conditions in Spain is used as a basis in order to make clear Spain's dealings with her American colonies. The general reader and younger student will find Chapter II on General Policy of especial value. Nowhere else is it so clearly shown that the King was the sole political superior of Spanish America. The great Spanish-American states were not colonies, as generally understood. They held the same relation to the Spanish Crown as the English colonies by 1770 claimed to exist between them and the British Crown. The relation was a personal union; from which flows the consequence that Spanish America could not be administered by the general government of Spain. It had to be governed by separate tribunals created by the King himself for this sole and special purpose. The most important of these was the Council of the Indies, which had executive, legislative and judicial powers.

The rest of Chapter II serves as an introduction to a study of another very important agency, the Casa de Contratacion, which controlled the economic and commercial regulations of Spanish America. The reader will find the chapter on the India House (Chapter III) very clearly written and exceedingly interesting. It occupies about 40 pages and gives a thorough and lucid explanation of the operation of the Casa so little known and so difficult for the general reader to understand. It is interesting to notice, in connection with the growing importance of the India House, that the fitting out of the great Armada of 1588 was, in part, intrusted to this organization.

Chapter IV, on the Audiencia and Viceroy, the reader will also find well written. One of the important points brought out is the fact that Cortes, after the Conquest of Mexico, established in connection with the *repartimientos* what was essentially European feudalism. Perhaps the most valuable portion of the chapter is the part which gives an adequate description of Spanish municipal administration in Spanish America, as well as descriptions of the system of *encomiendas* and of *repartimientos*. The attitude of Mendoza and Las Casas toward these systems which bore so

heavily upon the native population is noted. There succeed then five chapters which will prove very useful to any who desire to see the origin of the South American states. Chapter IX, however, is perhaps more interesting than the others just mentioned because of the famous socialistic experiment of the Jesuits in the Rio de la Plata country. Further illustrations of life in these missions would have added strength to the account, but the treatment of this socialistic experiment is eminently fair, which cannot be said of most accounts on the subject.

Passing over Chapter X on the King and the Church, Chapter XI on Spain's Economic Policy, deserves careful study. The keynote of this policy was privilege and restriction. The slave trade receives considerable attention, and the little known fact is dwelt upon that Spain's policy in agriculture as well as commerce was restrictive. The book closes with an instructive comparison of Spanish and English colonies which makes clear a point seldom dwelt upon, i. e., that the revolutions in Spanish America against the authority of Spain were based on economic considerations.

On the whole, the book is a valuable one, and well adapted to its purpose. Its conclusions are, in general, correctly drawn, and the work is based on accurate and critical study. The style is unusually clear and well adapted to the general reader and less mature student. The notes are meagre, and the citations of authorities comparatively few. Considering the purpose of the book this may seem an advantage, but the inquiring student will feel a disappointment on this score. The great value of the book lies in its correct presentation at this time of the main facts of Spanish development in America so that he who runs may read.

FRANK STRONG.

Yale University.

Memoirs of the Life and Correspondence of Henry Reeve, C.B., D.C.L.

By John Knox Laughton, M.A., Honorary Fellow of Gonville and Caius College, Cambridge, Professor of Modern History in King's College, London. In two volumes. Longmans, Green and Company, London, New York and Bombay, 1898.

The late Henry Reeve had two claims to a place in English history, as an eminently useful civil servant and as a publicist. His chief claim is as a publicist; first as an editorial writer for the *Times*, and the next as the editor of the *Edinburgh Review*, during the period when the *Edinburgh* was an exponent of Whig ideas, and before the development of daily journalism in England had deprived

both of the old Quarterlies of much of the political influence that they undoubtedly exercised until the sixties. Neither the *Edinburgh* nor the *Quarterly* is to-day without influence. But nowadays events are discussed more quickly than in the palmy days of the British Quarterlies. The London daily press is able to attach to itself writers of as much ability, and of as much political acumen, as those who wrote for the Quarterlies. So are the more important provincial daily journals; and with the changed relations between Politics and Journalism, and the development of telegraphic foreign correspondence, writers in the Quarterlies nowadays have little advantage as regards information and inspiration over the writers in the leading daily newspapers.

Reeve's editorship of the *Edinburgh Review* bridged over the period of change from the old to the new. He succeeded Sir George Cornewall Lewis as editor in 1885, and continued as editor until 1895. He was 82 when he died, and so far as the *Edinburgh* was concerned, he had worked up to the last. He was an excellent type of the old school of English publicist; and whether as editorial writer for the *Times* or as editor of the *Edinburgh*, had an exalted view of the importance of his work and its responsibilities. The keynote of his ideals was struck early in his career, while he was still of the *Times* staff, in a letter written in 1852 to Lord Granville, who had informed him that Louis Napoleon was irritated and annoyed beyond measure by the language of the *Times*, when he, as President, was contemplating the sequestration of the Orleans property. The "responsibility of journalists," Reeve then wrote to Lord Granville, "is in proportion to the liberty they enjoy. No moral obligation can be graver. But their duties are not the same, I think, as those of statesmen. To find out the true state of facts, to report them with fidelity, to apply to them strict and fixed principles of justice, humanity, and law, to inform as far as possible the very conscience of nations, and to call down the judgment of the world on what is false or base or tyrannical, appear to me to be the first duties of those who write. Those upon whom the greater part of political action devolves are necessarily governed by other rules."

As an editorial writer for the *Times*, Reeve states in his journals that he enjoyed the power his position conferred of "governing public opinion"; and he resigned a well-paid position, and abandoned work which was most congenial to him and which he could do while still holding the Clerkship of Appeals, when he could no

longer perform it in the spirit of his letter to Lord Granville. This was in 1855, after he had been associated with the *Times* for fifteen years, and had written for it nearly 2,500 articles. He was already Acting Editor of the *Edinburgh Review*. He had taken that position in February, 1855, when Sir George Cornewall Lewis became Chancellor of the Exchequer. On ceasing his connection with the *Times*, Reeve was appointed Editor of the *Edinburgh*, and as his letters and journals show, and as is further shown in the appreciations of him by Professor Laughton and Mr. Lecky, as Editor of the *Edinburgh* he sought to live up to the ideals of his letter.

Professor Laughton has not stinted himself in regard to space in telling the story of the life of Reeve from his letters and journals. Two large volumes may at first glance seem more than adequate to the subject. But while there are here and there letters which might have been omitted without loss, and while the journals are in places little more than the barest itineraries of travel, the volumes as a whole are of permanent value, and throw much light on a variety of subjects.

Reeve, as is well known, was the translator of de Toqueville's "Democracy in America," and was for twenty-five years the intimate friend of de Toqueville. There are many letters from de Toqueville. One of the earliest, written on the 2d of March, 1838, gives a good picture of de Toqueville's method of literary work. "I do not," he wrote, "prepare my work in advance. It is my custom only to arrange the plan and the principal ideas, and then to follow the current of my thoughts quickly or slowly as they serve me, so that I never know beforehand how much time or how much paper will be needed for what remains to be done." When Reeve's translation was published in 1840, de Toqueville wrote Reeve in regard to its reception in England. "I am not afraid of criticism," he wrote. "I am quite prepared for it. There is but one thing thoroughly annoying to an author—silence." As to Reeve's work as a translator, de Troqueville assured him that he had rendered his thoughts "in their most delicate shades with a fidelity and clearness" that seemed to him most perfect. De Toqueville was not willing to set himself up as a judge of Reeve's style. He took Madame de Toqueville's word for that, and she assured him that it was excellent—"clear, simple and, in short, exactly what it ought to be for a book on political philosophy."

To students of the working of English institutions, Professor Laughton's sketch of the history and work of the Judicial Committee of the Privy Council, of which Reeve was first Clerk, and

afterward Registrar, is peculiarly valuable, supplemented as it is by Reeve's own letters and journals, which give further insight into its working and its place in the economy of the British Empire. The Judicial Committee was created in 1833. In describing its peculiar and manifold functions, Professor Laughton asserts that not even excepting the Supreme Court of the United States, there is not, and never has been a tribunal in the world which has been called upon to administer laws of such variety, extending over so large a portion of the earth or affecting such vast multitudes of people, as does the Queen in Council through the Judicial Committee. Through the influence of the Marquis of Lansdowne, the President of the Council, Reeve was appointed Clerk in 1837. He held the office until 1853, when he was made Registrar, and he continued as Registrar until 1887, when he retired, and devoted himself exclusively to the editorship of the *Edinburgh* and to his work as literary adviser to the Longmans. Greville, whose Journals Reeve edited, was for years his colleague in the Council Office.

In politics, Reeve's work was almost exclusively behind the scenes. It brought him into contact during his long and busy life with many of the foremost men in English and European politics; and the full record of his life which Professor Laughton has set forth will abundantly repay reading to those who care to follow the history of political parties in England from the repeal of the Corn Laws until the split in the Liberal party on the Home Rule bill in 1886. Reeve was a Whig. He had no sympathy with democracy in England or Ireland any more than in the United States. He quite despaired of the United States in the closing months of Buchanan's Administration. American affairs then presented to him "a scandalous scene of corruption, slave trading and anarchy;" while in February, 1862, he was convinced that if the North defeated the South, reunion would be as far off as ever, and that the only safe course for the North was to regard the whole campaign as a kind of drawn battle, "and both sides negotiate as to terms of separation."

Reeve and some of his correspondents were nearly as pessimistic in regard to England. After the Home Rule split, the Socialist programme put forward by the Fabians in 1891 greatly disturbed them, and in January of that year the late Lord Derby was lamenting to Reeve that Home Rule, although badly crippled, was still capable of a good deal of mischief, and lamenting also that no new question was coming forward "except that of strikes, eight hours legislation, and Socialism generally."

EDWARD PORRITT.

Farmington, Conn.

Industrial Experiments in the British Colonies of North America.
By Eleanor L. Lord. Baltimore, Johns Hopkins Press, 1896—
154 pp.

This monograph presents the results of an investigation into the efforts of Great Britain to encourage the production of naval stores in the American colonies. In its preparation the author has utilized, with evident care and industry, the Board of Trade Papers in the Public Record Office in London. Students of American economic history will feel special interest in the materials furnished by Miss Lord's labors in a field that has remained so largely unworked.

In accordance with her established colonial policy, Great Britain desired to find in America the largest possible market for her manufactures, and especially for the products of her woolen industry. The trade between the colonies and the mother country generally resulted in a balance of indebtedness due to English merchants, for the colonists desired to purchase freely large quantities of imported comforts and luxuries. This balance must be made good in some way or other, and it was settled largely by shipments of coin which the colonists secured from their trade with Holland, Spain, France, and the West Indies. But here a difficulty was encountered. The Navigation Acts made the greater part of this trade unlawful; and, in spite of constant evasion, tended to repress the commerce of the colonies and to make it more difficult to secure the means of paying for the supplies imported from England. Thus the Navigation Acts tended to defeat the settled purpose of the mother country to enlarge the colonial markets for its manufactured products.

If the colonies could have been induced to devote more attention to the production of naval stores, this difficulty would have been obviated. Such stores would have found a large and increasing market in Great Britain, and would have furnished the colonists with the means of paying for larger purchases of English products. Moreover, if it had been possible to draw from the colonies adequate supplies of naval stores, Great Britain would have been no longer dependent upon the Baltic countries for these commodities, which were so vitally important to its commercial and naval interests. From the point of view of the mother country, therefore, it seemed desirable to encourage the production of naval stores in the colonies.

Early in the seventeenth century, the rich forests of the Atlantic seaboard had attracted attention, and it had been suggested that naval supplies might be produced advantageously in the plantations.

Masts were exported from New England as early as 1635, and eighteen years later the Council of State considered various means of removing the difficulties that attended the importation of tar, masts, deals, etc. from the colonies. These obstacles were, first, duties imposed by the mother country; second, the high cost of labor in the new settlements; and third, the heavy freight charges for transporting such bulky products across the Atlantic. This last difficulty was, perhaps, the most important, for two or three voyages could be made to Norway or to the Baltic for every one made to America. In spite of all obstacles, however, New Hampshire and the settlements in Maine began to export considerable quantities of masts, while Carolina produced not a little pitch and tar for export.

In 1697, the newly established Board of Trade and Plantations sent commissioners to New England to investigate the subject of naval supplies, but little was accomplished in this manner. Then two attempts were made to form chartered companies to engage in the production of such stores, but the hesitancy of the Board, and determined opposition on the part of the colonists, frustrated such efforts. Another project was advanced in 1710. It was proposed to settle bodies of poor emigrants in regions suitable for the production of naval stores, and to develop systematically the production of these articles. Governor Hunter succeeded in establishing such a settlement in New York, but the only tangible result of his labors was a heavy bill of expense.

But the War of the Spanish Succession and the formation of a Swedish company that monopolized the Baltic trade in naval stores finally brought this subject to the attention of Parliament. In 1705, an act was passed by which bounties were offered on the importation of tar, pitch, hemp, masts, yards, and bowsprits, produced in the colonies. Under this law there occurred a considerable increase in colonial exports of pitch, tar, and turpentine. But the experiment was an expensive one for the British Navy, which, between 1713 and 1717, paid out £90,544 in premiums, while it secured less than eight thousand barrels of colonial tar and pitch. In 1722 another act removed all duties upon wood, planks, and timber, imported directly from the plantations; so that colonial producers were given an advantage in the English market. This act also prescribed the methods that must be followed in manufacturing all tar for which bounties might be sought. This last feature of the law of 1722 served to extinguish what little interest the original bounty law had excited in the naval supply industry.

By this time, moreover, shipbuilding, commerce, and various branches of manufactures had developed sufficiently in several of the colonies to absorb the attention of the people. This fact rendered all the more futile the efforts of the home government to divert colonial industry into the production of naval stores. Other chapters of the monograph are devoted to the development of the lumber industry in New England, and the futile efforts of the home government to preserve the valuable ship timber in the forests. These require no special mention.

In the bibliography, Miss Lord seems to have overlooked Oldmixon's *British Empire in America* and Douglass's *Summary of the British Settlements*. Both of these works discuss the trade in naval stores. On page 127, the name of Joseph Jenks is changed to "Joseph Jenkins." On page 135, discussing the period of paper money inflation in New England, the author says: "The following table (of Boston exchanges) will serve to indicate the rapidity of the depreciation of paper currency, which had been issued originally to pay for the Canadian expeditions in the late war, and which continued to be received and *held at par by main force*, until it was redeemed in specie paid over to Massachusetts by Parliament for the ransom of Louisburg." The reader can hardly fail to wonder how a currency whose rapid depreciation is admitted in the first clause of this sentence, could have been "held at par by main force," or by anything else. But such criticisms do not detract from the value of the monograph as a useful investigation into hitherto unused sources of information concerning the colonial trade in naval stores.

CHARLES J. BULLOCK.

Cornell University.

Les Industries monopolisées aux États-Unis. Par Paul de Rousiers
Paris, Armand Colin & Cie, 1898—12mo, 332 pp.

There are very few subjects at the present time in which the masses of the people are more interested, or on which there are more divergent opinions, than that of trusts. It is still too early for a comprehensive work on the subject to be written, and the task which M. Rousiers has set for himself is to trace the development of a few of the most typical instances, and from the causes which have led to their failure or continued success to deduce the probable future of this most pronounced form of concentration. The first portion of the work is largely historical, and deals with the trusts in oil, coal, sugar, steel, whiskey and cordage. Leaving

this, he devotes a chapter to those industries where the possibilities of monopoly are based upon the possession of patent rights, and another to the *quasi*-public enterprises, where the field for competition is necessarily limited. It is in the concluding chapter that the author draws the lessons gained from his observations. He finds that the complicity of the railroads, the protective tariff legislation and patents have been the *sine qua non* of the successful attempts to form trusts. The first of these springs from a lack of public authority, in turning over to individuals powers that should be exercised by the State. In so doing, we are suffering from what he is pleased to call "an abuse of the principle of *laissez faire*." The protective system, on the contrary, is the result of the exaggerated use of the power of the state which takes from the whole people the rights and benefits that should be theirs and delivers them into the hands of the favored few. It is along this line that lies the great danger of the future. The natural limit to which prices can rise is no longer kept down by free foreign importation. Competition is at least removed, if not prevented from this quarter. This limit may be reached, as was the case with the Wire Nail Trust when it was found that the goods produced by this organization could be sent to England and returned with the addition of the import duties and still be sold at a price lower than that demanded by the Trust. The granting of patent rights is a proper field for the use of public authority since it is beneficial to industry.

From the economic standpoint M. Rousiers thinks that trusts have been a benefit to the community, but politically they are a menace to the country. He draws a vivid picture of the corruption of State legislatures and city councils, by the means of skilfully distributed shares. He is glad to see that the indiscriminate granting of franchises by the city authorities has passed, and that the public now draws the benefit of part of the returns that formerly entered the pockets of the shareholders. As public sentiment is opposed to trusts, he expects that in time most of them will pass away. Where the monopoly is founded upon natural causes, as is the case with the Standard Oil Company, there seems to be the possibility for a long-continued existence, but where they are propped up by artificial means they are clearly doomed. If this is the end in view, then the repeal of the present tariff legislation would sweep away most of the unnatural means by which at present prices are kept above the competitive level.

WM. B. BAILEY.

Yale University.

La Participation aux Bénéfices. Par Emile Waxweiler. Paris, A. Rousseau, 1898—8vo, 320 pp.

In 1895 M. le Comte de Chambrun, the well known French philanthropist, offered a prize of 25,000 francs for the best essay on the subject of profit-sharing. The committee entrusted with the examination of some twenty-five MSS., which were submitted in competition, decided to divide this sum into three prizes, the first and largest of which (12,000 francs) was voted to the volume named above. M. Waxweiler is at the head of a bureau in the Belgian Labor Department; he is the author of two smaller volumes on "High Wages in the United States," and the "Regulation of Sunday work in Switzerland." He writes here as a sincere but not bigoted believer in profit-sharing, whose hopes of its future are moderate, but who is convinced that it is a system economically sound and morally commendable, and must therefore make its way, however gradually.

The programme for the Chambrun competition called for essays which should supplement, not repeat, earlier works on the subject, and should pay especial attention to the legal aspects of participation. As the latter matter is comparatively easy of determination, the fullest possible exposition of the fortunes of the system in late years, especially in the decade 1886-1896, would have seemed to be the line to commend itself to the favorable judgment of the committee. To our surprise, M. Waxweiler, despite his travels in this country and Europe, has made no attempt to take a more recent census than M. A. Trombert's or my own (1888): he records no observations made in visits to profit-sharing establishments, and his work lacks that freshness which would come from detailed study of new instances, while it can lay claims to no other merits of style than clearness and logical order. The two diagrams showing the development of profit-sharing according to decades and countries since 1841, are the most novel feature of the book, but unfortunately, they cannot be said to be the most obviously trustworthy, as the figures set down are not supported by tables of cases, and successful and unsuccessful instances are lumped to show the "development" (which thus means only trials, fortunate or unfortunate) of the system.

M. Waxweiler's most animated pages are those in which he refutes the scholastic objections to participation made by M. Paul Leroy-Beaulieu in his last great treatise, on Economics. This distinguished savant rests his present argument (he has previously

favoring others as more potent) on the assumption that profits are purely the creation of the *entrepreneur*, and hence it is morally wrong, as well as economically improper, for the employee to touch them in any degree. M. Waxweiler shows us that profits, on the other hand, are diminished before the balance sheet is made up, by the subtraction of sums destined for other factors in the industry, and that there is no logical gap between this process and a later subtraction in favor of the workman. "Le dividende," he well says, "n'est pas un fonds privilégié, et ce n'est point un sacrilège économique d'y toucher." It is in this second part of his work on participation from the point of view of economic science, that M. Waxweiler's chief merits are shown. He analyses the whole process with great sobriety and candor. Reaching no novel results (which would, indeed, be out of the question), he has traversed familiar ground with an independent mind and a candid temper.

The part of the work devoted to the legal aspects of participation does as well with this field as its infertility will allow. That the agreement to share profits is a common-law agreement; that it is in the control of the employer, since he has proposed it and reserved for himself the right of modification or abrogation at pleasure; and that the employee who disregards the rules can have no legal action against the employer for a bonus withheld for this reason—these points, to mention no others, are sufficiently obvious to an ordinary capacity. As the programme called for a special study of this part of the subject, the abundance of more or less learned terms in which M. Waxweiler has expounded truths almost self-evident is not inexcusable. But, as we have said, it is in the general economic exposition of participation—not in his rather meagre array of facts and instances, or in his skillful presentation of what little law there is concerned with profit-sharing—that the main force of this essay lies; doubtless this was the chief reason for the distinction conferred upon it by the judges.

NICHOLAS P. GILMAN.

Meadville, Penn.

Railway Economics. By H. T. Newcomb, Chief of the Section of Freight Rates in the division of Statistics of the U. S. Dep't of Agriculture. Philadelphia, Railway World Publishing Co., 1898—152 pp.

This is a collection of papers originally published in the *Railway World*, but well worth reprinting in book form. Nowhere else is the recent history of American railroad traffic so compactly presented to the reader. The author has collected his facts with care; he has an excellent sense of proportion; his conclusions are generally sound.

In the attempt to treat so many topics it is not surprising that a few errors of fact or judgment should occur. The *outstanding* capitalization of the railroads of the United States he puts about \$1,000,000,000 too high, by including stocks and bonds which are held in the treasury of other roads. In this, he but follows the authority of the Interstate Commerce Commission; but it is none the less a violation of fundamental principles to count liabilities subsisting between members of a group as outstanding liabilities of the group as a whole. In dealing with income (p. 23) the author shows that he is acquainted with this theory; he probably has never had his attention called to its full scope as applied to capital accounts. In his treatment of pools, he does not fully grasp the difference of purpose between the joint rate sheet, which is essentially an agreement between principals, and the division of traffic, which is chiefly a means of protecting the principals against the consequences arising from irregularity of their agents. Nor does the method adopted for justifying the system of charging what the traffic will bear seem a very practical one. The assumptions made in Chapter XII are confessedly not realized in practice. A theory based upon them, therefore, makes the impression of hanging in the air; and the final statement of principles deduced from it (p. 88) seems at once less clear and less convincing than that which results from more concrete presentations of the case by writers like Alexander or Acworth. But these criticisms, all taken together, are not fundamental enough to affect the general merit of the work.

A. T. H.

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